



U.S. Department of Transportation

National Highway Traffic Safety Administration

#### Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.





#### CASE SUMMARY

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

PSU 81

Administration

CASE NO. 038K

TYPE OF ACCIDENT Car/Lt. Truck - Turn into Path

#### A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. <u>Do not include any personal identifiers.</u>)

Vehicle #2 was northbound in the inside lane of a two way, four lane, undivided roadway. Vehicle #1 was westbound exiting a parking lot to turn southbound. As vehicle #1 crossed the northbound lanes, vehicle #2 struck the left side of vehicle #1. On impact vehicle #1 rotated CCW to a final rest facing southbound in the inside southbound lane. Vehicle #2 contined northbound for a short distance, then stopped. Both vehicles were towed due to damage.

	B. VEHICLE PROFILE(S)								
	Class		Most Seve Based on Vehi	re Damage cle Inspection	C				
Vehicle No.	of Vehicle	Year/Make/Model	Damage Plane	Severity Description	Component Failure				
1	Intermediate	1991 Ford Taurus 4 door	Left	Severe	None				
2	Pickup	1983 Ford F-250	Front	Severe	None				

DO NOT SANITIZE THIS FORM

	C. PERSON PROFILE(S)								
Vehicle		Seat	Restraint						
No.	Role	Position	Use	Body Region	Injury Type	AIS	Injury Source		
1	Driver Passenger		Lap&Shoulder Air Bag Lap&Shoulder	ribs facial	fractuled abrasions	5 /	DIFER OCCUPANT CORINER)		
2	Driver Passenger		Lap&Shoulder Lap&Shoulder		Not Injure				
2	Passenger	<del>-</del>	•	. 11	[1				
						ĺ			

**Body Region** 

Abdomen Ankle-foot Arm (upper)

Back-thoracolumbar spine

Chest Elbow Face Forearm Head-skull

Leg (lower) Lower limbs(s) (whole or unknown

part)

Neck-cervical spine

Pelvic - hip Shoulder Thigh

Upper limb(s) (whole or unknown

part) Whole body  ${\bf Wrist-hand}$ 

Detachment, separation

Brain Ears Eye Heart

Kidneys Liver Mouth

Noise Pulmonary-lungs

Spleen

Thyroid, other endocrine gland

Vertebrae

Injury Type

Abrasion Amputation Avulsion Burn Concussion Contusion

Crush

Dislocation

Fracture

Fracture and dislocation

Laceration Other

Perforation, puncture

Rupture Sprain Strain

Total severance, transection

Unknown

Abbreviated Injury Scale

(1) Minor injury

(2) Moderate injury

(3) Serious injury

(4) Severe injury

(5) Critical injury

(6) Maximum (untreatable)

(7) Injured, unknown severity



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**ACCIDENT COLLISION DIAGRAM** 

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM National Highway Traffic Safety Administration Indicate Case Number-Stratum 038 K PSU No. 8 North 40 140 401 40 SCALE = , 05 = 1 M V R.P. UTILITY POLE NOTE, PAINT MARKS

SHOWING WALLS ON ENTER

NOT PAINT ON THE

NOT PAINT ON ENTER

NOT P



U.S. Department of Transportation

HS Form 431B (1/93)

**ACCIDENT COLLISION DIAGRAM** 

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM National Highway Traffic Safety Administration Indicate Case Number-Stratum 038 K PSU No. North 40 40 40 40 40 SCALE = 105 = 1 M V R.P. UTILITY POLE PARKINGLOT NUTE PAINT JUNELS

STOWN MANUEL SUN THE

SHOWING MANUEL SUN THE

NUT MANUEL SUN THE

N Parid shunch

Scale: 1 centimeter = 1 meter - (1/100)



U.S. Department of Transportation National Highway Traffic Safety

### ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

Administration

Primary Sampling Unit Number

Case Number-Stratum 038

#### **ACCIDENT COLLISION DIAGRAM** LEVEL I

# PHYSICAL EVIDENCE ABSENT

To be accomplished when there is no physical evidence present at the scene:

- approximate vehicle orientation at impact and final rest
- applicable road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, etc.)
- \* applicable traffic controls (e.g., speed
- north arrow placed on diagram
- sketch required

#### LEVEL II PHYSICAL EVIDENCE PRESENT

In addition to the level I tasks noted above, the following must be accomplished when

LEVEL II (Cont'd) physical evidence is present:

- document reference point and reference line relative to physical features present at the scene
- \* scale documentation of all accident induced physical evidence
- scaled documentation of all roadside objects contacted
- roadway surface type and condition of applicable roadways
- \* grade measurements for all applicable roadways and at location of rollover initiation
- scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:
  - a) physical evidence, or
  - b) reconstructed accident dynamics

**CRASH DATA** 

VEH. #1 VEH. #2 VEH. #3

Surface Condition

Grade (v/h) Measurement (between impact and final rest)

Grade (v/h) Measurement (at location of rollover initiation)

Reference Point: UTILITY POLE FAST	Reference line: <u>EAS7</u>	FOG LWE
ltem	Distance and Direction from Reference Point	Distance and Direction from Reference Line
RP	94 m N OF THE DRIVE WAY	30 E
2L	30 W	0
UEH#2 SKID MARKS		
BEgIN 4	2675	63 W
" RF	264 5	45 W
END LF	63 5	60 W
11 RF	63 5	45 W
VEH#1 Skids From Inpact		
ROTATION BEGIN LF	1363	56 W
" RF	118 5	51 W
FND LF	1275	6/ W
" RF	975	63 W

ltem	Distance and Direction from Reference Point	Distance and Direction from Reference Line
·		
		·

National Highway Traffic Safety Administration

#### **ACCIDENT FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

١.	Primary	Sampling	Unit	Number	
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81

2. Case Number - Stratum

038 K

#### **IDENTIFICATION**

3. Number of General Vehicle Forms Submitted

02

4. Date of Accident (Month, Day, Year)



5. Time of Accident

1915

Code reported military time of accident.

NOTE: Midnight = 2400

Unknown = 9999

### **SPECIAL STUDIES - INDICATORS**

Check (/) each special study (SS14-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. \_\_\_SS14 Fatal AOPS

 $\underline{\mathcal{O}}$ 

7. \_\_\_SS15 Administrative Use

0

8. \_\_\_SS16 \_\_\_\_

0

9. SS17

0

10. \_\_\_SS18

0

### **NUMBER OF EVENTS**

11. Number of Recorded Events in This Accident

01

Code the number of events which occurred in this accident.

#### **ACCIDENT EVENTS**

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0</u> <u>1</u>	13. <u>O /</u>	14. <u>03</u>	15. <u></u>	16. <u>0</u> <u>Z</u>	17. 15	18
19. <u>0</u> <u>2</u>	20	21	22	23	24	25
26. <u>0</u> <u>3</u>	27	28	29	30	31	32
33. <u>0 4</u>	34	35	36	37	38	39
40. <u>0</u> <u>5</u>	41	42	43	44	45	46

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

# CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm)
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 4,500 kgs GVWR)
- (13) Passenger van (≤ 4,500 kgs GVWR)
- (14) Other van (≤ 4,500 kgs GVWR)
- (15) Pickup truck (≤ 4,500 kgs GVWR)
- (18) Other truck (≤ 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

# CODES FOR GENERAL AREA OF DAMAGE (GAD)

# CDS APPLICABLE AND OTHER VEHICLES

# OTHER VEHICLES VEHICLES

- (0) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

(0) Not a motor vehicle

TDC APPLICABLE

- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo area (rear of trailer or straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

### CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

#### (01-30) - Vehicle Number

#### Noncollision

- (31) Overturn rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):
- (35) Noncollision injury
- (38) Other noncollision (specify):
- (39) Noncollision details unknown

#### Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

#### Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify):

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify):
- (69) Unknown fixed object

#### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify):
- (89) Unknown nonfixed object
- (98) Other event (specify):
- (99) Unknown event or object

National Accident Sampling System-Crashworthiness Data System: General Vehicle Form Page 2 **OCCUPANT RELATED** 24. Rollover (0) No rollover (no overturning) 16. Driver Presence in Vehicle (0) Driver not present Rollover (primarily about the longitudinal axis) (1) Driver present (1) Rollover, 1 quarter turn only (9) Unknown (2) Rollover, 2 quarter turns (3) Rollover, 3 quarter turns 17. Number of Occupants This Vehicle (4) Rollover, 4 or more quarter turns (specify): (00-96) Code actual number of occupants for this vehicle (97) 97 or more (5) Rollover--end-over-end (i.e., primarily (99) Unknown about the lateral axis) (9) Rollover (overturn), details unknown 18. Number of Occupant Forms Submitted OVERRIDE/UNDERRIDE (THIS VEHICLE) VEHICLE WEIGHT ITEMS 3<u>8</u>0 25. Front Override/Underride (this Vehicle) 19. Vehicle Curb Weight Code weight to nearest 10 kilograms. 26. Rear Override/Underride (this Vehicle) (045) Less than 450 kilograms (610) 6,100 kilograms or more (0) No override/underride, or (999) Unknown not an end-to-end impact Jbs X .4536 = 1 Override (see specific CDC) Source: (1) 1st CDC (2) 2nd CDC 0,000 o (3) Other not automated CDC (specify): 20. Vehicle Cargo Weight Code weight to nearest 10 kilograms. Underride (see specific CDC) (000) Less than 5 kilograms (4) 1st CDC (450) 4,500 kilograms or more (999) Unknown (5) 2nd CDC (6) Other not automated CDC (specify): \_ lbs X .4536 = \_\_\_,\_\_ \_\_ kgs RECONSTRUCTION DATA (7) Medium/heavy truck or bus override (9) Unknown 21. Towed Trailing Unit (0) No towed unit (1) Yes-towed trailing unit **HEADING ANGLE AT IMPACT FOR** (9) Unknown HIGHEST DELTA V 22. Documentation of Trajectory Data Values: (000)-(359) Code actual value for This Vehicle (997) Noncollision (O) No (998) Impact with object (1) Yes (999) Unknown 27. Heading Angle For This Vehicle 23. Post Collision Condition of Tree or Pole (For Highest Delta V) (0) Not collision (for highest delta V) with 28. Heading Angle For Other Vehicle tree or pole (1) Not damaged (2) Cracked/sheared (3) Tilted <45 degrees (4) Tilted ≥45 degrees (5) Uprooted tree (6) Separated pole from base (7) Pole replaced (8) Other (specify):

(9) Unknown

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Page 5

OTHER DATA	61. Rollover Initiation Object Contacted
56. Driver's Zip Code  (00000) Driver not present (00001) Driver not a resident of U.S. or territories	62. Location on Vehicle Where Initial Principal Tripping Force Is Applied
Code actual 5-digit zip code (99999) Unknown  57. Driver's Race/Ethnic Origin (0) Driver not present (1) White (non-Hispanic) (2) Black (non-Hispanic) (3) White (Hispanic) (4) Black (Hispanic) (5) American Indian, Eskimo or Aleut (6) Asian or Pacific Islander	(0) No rollover (1) Wheels/tires (2) Side plane (3) End plane (4) Undercarriage (5) Other location on vehicle (specify):  (8) Non-contact rollover forces (specify):  (9) Unknown
(8) Other (specify): (9) Unknown	63. Direction of Initial Roll  (0) No rollover
58. Vehicle Special Use (This Trip) (0) No special use (1) Taxi (2) Vehicle used as school bus (3) Vehicle used as other bus (4) Military (5) Police (6) Ambulance	<ul> <li>(1) Roll right - primarily about the longitudinal axis</li> <li>(2) Roll left - primarily about the longitudinal axis</li> <li>(5) End-over-end (i.e., primarily about the lateral axis)</li> <li>(9) Unknown roll direction</li> </ul>
(7) Fire truck or car	PRECRASH DATA
	FILCHASH DATA
(8) Other (specify):(9) Unknown	64. Pre-Event Movement (Prior to Recognition of Critical Event)
(8) Other (specify):	64. Pre-Event Movement (Prior to Recognition of Critical Event)  (01) Going straight (02) Slowing or stopping in traffic lane (03) Starting in traffic lane (04) Stopped in traffic lane
(8) Other (specify):	64. Pre-Event Movement (Prior to Recognition of Critical Event)  (01) Going straight (02) Slowing or stopping in traffic lane (03) Starting in traffic lane (04) Stopped in traffic lane (05) Passing or overtaking another vehicle (06) Disabled or parked in travel lane (07) Leaving a parking position (08) Entering a parking position (09) Turning right (10) Turning left (11) Making a U-turn (12) Backing up (other than for parking position) (13) Negotiating a curve (14) Changing lanes (15) Merging (16) Successful avoidance maneuver to a previous critical event (97) Other (specify):
(8) Other (specify): (9) Unknown  ROLLOVER DATA  If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank. If GV24 (Rollover) = 0, then GV59-GV63 must equal 0. If GV24 = 9, then GV59-GV63 must equal 9.  59. Rollover Initiation Type (0) No rollover (1) Trip-over (2) Flip-over (3) Turn-over (4) Climb-over (5) Fall-over (6) Bounce-over (7) Collision with another vehicle (8) Other rollover initiation type specify):	64. Pre-Event Movement (Prior to Recognition of Critical Event)  (01) Going straight (02) Slowing or stopping in traffic lane (03) Starting in traffic lane (04) Stopped in traffic lane (05) Passing or overtaking another vehicle (06) Disabled or parked in travel lane (07) Leaving a parking position (08) Entering a parking position (09) Turning right (10) Turning left (11) Making a U-turn (12) Backing up (other than for parking position) (13) Negotiating a curve (14) Changing lanes (15) Merging (16) Successful avoidance maneuver to a previous critical event

### CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover (01-30) — Vehicle Number
- Noncollision
  - (31) Turn-over fall-over
  - (33) Jackknife
- Collision With Fixed Object
  - (41) Tree (≤ 10 cm in diameter)
  - (42) Tree (> 10 cm in diameter)
  - (43) Shrubbery or bush
  - (44) Embankment
  - (45) Breakaway pole or post (any diameter)
- Nonbreakaway Pole or Post
  - (50) Pole or post (≤ 10 cm in diameter)
  - (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
  - (52) Pole or post (> 30 cm in diameter)
  - (53) Pole or post (diameter unknown)
  - (54) Concrete traffic barrier
  - (55) Impact attenuator
  - (56) Other traffic barrier (includes guardrail) (specify):

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify):
- (69) Unknown fixed object
- Collision with Nonfixed Object
  - (71) Motor vehicle not in-transport
  - (76) Animal
  - (77) Train
  - (78) Trailer, disconnected in transport
  - (88) Other nonfixed object (specify):
  - (89) Unknown nonfixed object
  - (98) Other event (specify):
  - (99) Unknown event or object



U.S. Department of Transportation

National Highway Traffic Safety Administration

# **EXTERIOR VEHICLE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

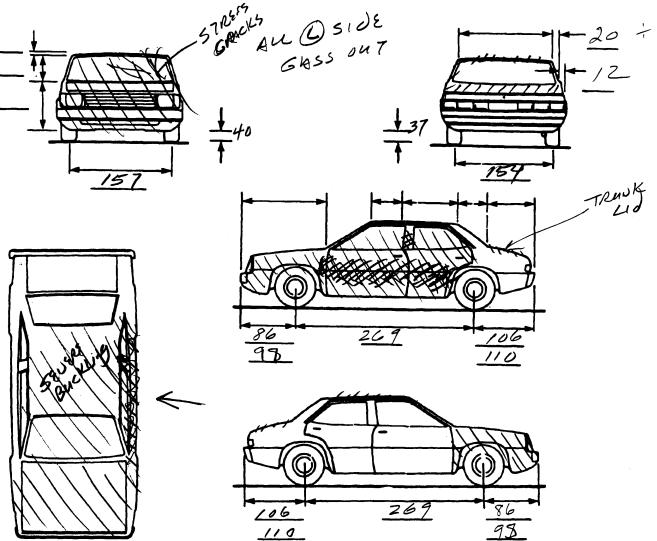
1. Prima	ry Sampling	Unit Nu	mber	81	з	. Vehicl	e Numb	er				
2. Case	Number - St	ratum	_0	381	$\leq$							
				VEHICLE	IDENTI	FICAT	ION					
	FAC		<i>←</i> ′ .							Model Y		
Vehicle Ma	ake (specify)	:	tore	)		Vehicle	Model (s	specify):		twee	(>	
				L	OCATO	PR						
	e end of the amaged axle	_	•	ct to the vel	hicle lon	gitudina	l center	line or t	oumper o	corner fo	or end in	npacts
Specific I	mpact No.		Location	of Direct D	amage					of Field	$-\!$	
		STIVE	7557cm	IN FROM	17 OF		STA	275/	16 cm	BEH.		
	·		7/	HE LR 1	AXLE						A	XLE
				SH PROF								
	dentify the pail, etc.) and					e taken	(e.g., at	bumpe	r, above		r, at sill	
r	Measure and	docum	ent on the v	ehicle diag	ram the	location	of max	imum c	rush.		<b>&gt;</b> ) -	
	Measure C1 mpacts.		rom driver to									< <i>H</i>
t	ree space v he individua side taper, e	I C loca	tions. This	may include	e the fol	lowing:	bumper	lead, b	umper t	body cor aper, sid	ntour ta le protr	ken at usion,
(	Jse as many	lines/co	olumns as n	ecessary to	describ	e each	damage	profile.				
Specific Impact	Plane of II C-Measure		Direct D Width	Max	Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	Сª	±D
Number	LEFT S	3/11	(CDC) 17-3	Crush 40	275	0	6.5	39	33.5	16.5	0	+9
	773072 -	100										
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						<u> </u>						
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<u> </u>	<del> </del>			<del> </del>	+		<del>                                     </del>	<del> </del>	<del>                                     </del>	<del>                                     </del>		<del>                                     </del>

# ORIGINAL SPECIFICATIONS WORK SHEET

						$\sim$ 4 $\alpha$
Wheelbase		inches	x	2.54	=	269 cm
Overall Length	_188.4	inches	x	2.54	=	_4_7_9 cm
Maximum Width	70.8	inches	x	2.54	=	$\overline{180}$
Curb Weight	3,049	pounds	x	.4536	=	_ <u>l, 383</u> kg
Average Track		inches	x	2.54	=	_155 cm
Front Overhang		inches	X	2.54	=	$=$ $\frac{9}{7}$ cm
Rear Overhang		inches	X	2.54	=	$\underline{\hspace{1cm}/\hspace{1cm}/\hspace{1cm}}$ cm
Undeformed End Width		inches	X	2.54	=	cm
Engine Size: cyl./displ.	<u>V-6</u>	СС	X	.001	=	<u>3.0</u> L
		CID	X	.0164	=	L

61.6-154

#### National Accident Sampling System-Crashworthiness Data System: Exterior Vehicle Form Page 2 VEHICLE DAMAGE SKETCH TIRE-WHEEL DAMAGE **ORIGINAL SPECIFICATIONS** WHEEL STEER ANGLES a. Rotation physically (For locked front wheels or restricted deflated Wheelbase cm displaced rear axles only) RF ± \_\_\_ • Overall Length cm LF ± Maximum Width RR ± cm LR ± **Curb Weight** ' kg Within ± 5 degrees Average Track (1) Yes (2) No (8) NA (9) Unk. **ORIVE WHEELS** Front Overhang cm EV FWD □ RWD □ 4WD Rear Overhang cm TYPE OF TRANSMISSION **Undeformed End Width** cm **Approximate** M Automatic Engine Size: cyl./displ. $\bigvee \mathscr{G}$ Cargo Weight ☐ Manual **MEASUREMENTS IN CENTIMETERS**



Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

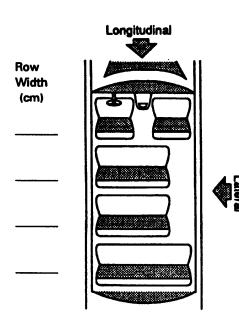
Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET								
		С	ODES FOR (	DBJECT COM	NTACTED			
(01-30	) – Vehicle Nu	ımber		,-	7) Fence			
				•	8) Wall			
Nonco					9) Building			
(31)	Overturn — r	ollover		(6	0) Ditch or	culvert		
	Fire or explos	sion		(6	1) Ground			
(33)	Jackknife				<ol><li>Fire hydi</li></ol>	rant		
(34)	Other intraun	it damage (specif	fy):	(6	3) Curb			
					4) Bridge			
(35)	Noncollision i	njury	•	(6	8) Other fix	ced object (s	specify):	
(38)	Other noncoil	lision (specify):						<del> </del>
				_ (6	9) Unknow	n fixed obje	ct	
(39)	Noncollision -	<ul> <li>details unknow</li> </ul>	vn					
					sion with No			
	on With Fixed C				1) Motor ve		-transport	
	Tree (≤ 10 c			•	2) Pedestria			
	Tree (> 10 c				3) Cyclist o			
	Shrubbery or	bush		(7	4) Other no	onmotorist o	r conveyand	e
(44)	Embankment				<b>5</b> \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \			<del></del>
(45)	D1	-1 /	J' 4\		5) Vehicle	occupant		
(45)	Breakaway po	ole or post (any o	nameter)		6) Animal			
N1 1		- D:4			7) Train	J:	<b>.</b>	-4
	eakaway Pole o		4 1		8) Trailer, o			
		≤ 10 cm in dian		1-18	8) Other no	ontixea obje	ct (specify):	
(51)		> 10 cm but ≤	30 cm in	K 10	9) Unknow	n nonfixed	ahioot	
/52)	diameter)	> 30 cm in dian	notor)	14 10	9) Unknow	n nonnxea	object	
		diameter unknov		V 19	8) Other ev	ent (specify	<b>/</b> )•	
(00)	Tolo of pool (		···,	10	o, o	one (opcon)	.,.	
/E //								
	Concrete traf			(9	9) Unknow	n event or o	object	
(55)	Impact attenu	uator		(9	9) Unknow	n event or o	bject	
(55)	Impact attenu Other traffic		guardrail)	(9	9) Unknow	n event or o	object	
(55)	Impact attenu	uator	guardrail)	<b>-</b>	9) Unknow	n event or o	bbject	
(55)	Impact attenu Other traffic	uator barrier (includes (		- SIFICATION I			object	
(55)	Impact attenu Other traffic	uator barrier (includes (		_	BY EVENT N		object	
(55) (56) Accider	Impact attent Other traffic (specify):	DEFORMAT	TION CLASS	- SIFICATION I	BY EVENT N (4) Specific	IUMBER (5) Specific	(6)	
(55) (56) Accider Event	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction	FION CLASS	- SIFICATION I	BY EVENT N (4) Specific Longitudinal	(5) Specific Vertical or	(6) Type of	(7)
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force	Incremental Value of	(3)	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral	(6) Type of Damage	Deformation
(55) (56) Accider Event	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	FION CLASS	- SIFICATION I	BY EVENT N (4) Specific Longitudinal	(5) Specific Vertical or Lateral Location	(6) Type of	
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3)	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3)	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral	(6) Type of Damage	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3)	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation
(55) (56) Accider Event Sequence	Impact attent Other traffic (specify):	DEFORMAT  (1) (2) Direction of Force (degrees)	Incremental Value of	(3) Deformation	BY EVENT N  (4)  Specific  Longitudinal  or Lateral	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	Deformation

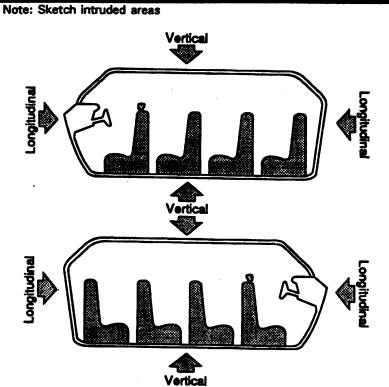
dministration IN LEKI	CRASHWORTHINESS DATA SYSTE
1. Primary Sampling Unit Number	S) GLAZING
- > (	Glazing Damago from Impact Forces
2. Case Number - Stratum O 7 2	$\frac{1}{1}$ 15. WS $\frac{1}{2}$ 16. LF $\frac{1}{6}$ 17. RF $\frac{1}{6}$ 18. LR $\frac{1}{6}$ 19. RR $\frac{1}{6}$
3. Vehicle Number	20. BL <u>Q</u> 21. Roof <u>8</u> 22. Other <u>Q</u>
INTEGRITY	(0) No glazing damage from impact forces
4. Passenger Compartment Integrity (00) No integrity loss	(2) Glazing in place and cracked from impact forces (3) Glazing in place and holed from impact forces (4) Glazing out-of-place (cracked or not) and not holed from impact forces
Yes, Integrity Was Lost Through (O1) Windshield (O2) Door (side) (O3) Door/hatch (back door)	(5) Glazing out-of-place and holed from impact forces (6) Glazing disintegrated from impact forces (7) Glazing removed prior to accident (8) No glazing
(04) Roof (05) Roof glass	(9) Unknown if damaged
(06)/Side window (07) Rear window (backlight) (08) Roof and roof glass	Glazing Damage from Occupant Contact
(09) Windshield and door (side) (10) Windshield and roof	23. WS <u>9</u> 24. LF <u>0</u> 25. RF <u>0</u> 26. LR <u>0</u> 27. RR <u>0</u>
(11) Side and rear window (side window and backlight (12) Windshield and side window	28. BL <u>O</u> 29. Roof <u>O</u> 30. Other <u>O</u>
(13) Door and side window (98) Other combination of above (specify):	(0) No occupant contact to glazing or no glazing (1) Glazing contacted by occupant but no glazing damage (2) Glazing in place and cracked by occupant contact
(99) Unknown	(3) Glazing in place and holed by occupant contact (4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact (5) Glazing out-of-place by occupant contact and holed by
Door, Tailgate or Hatch Opening  5. LF 3 6. RF / 7. LR 3 8. RR / 9. TG/	occupant contact  (6) Glazing disintegrated by occupant contact  (9) Unknown if contacted by occupant
	If No Glazing Damage And No Occupant Contact or No
(0) No door/gate/hatch (1) Door/gate/hatch remained closed and operational (2) Door/gate/hatch came open during collision	Glazing, Then Code IV31 Through IV46 As Ø
(3) Door/gate/hatch jammed shut (8) Other (specify):	Type of Window/Windshield Glazing
(9) Unknown	31. WS / 32. LF 2 33. RF 0 34. LR 2 35. RR 0
	36. BL <u>O</u> 37. Roof <u>O</u> 38. Other <u>O</u>
Damage/Failure Associated with Door, Tailgate o Opening in Collision. If IV05-IV09 ≠ 2, Then co	(0) No glazing contact and no damage, or no glazing r Hatch de Ø (2) AS-2 — Tempered
10. LF <u>O</u> 11. RF <u>O</u> 12. LR <u>O</u> 13. RR <u>O</u> 14. T	(3) AS-3 — Tempered-tinted (4) AS-14 — Glass/Plastic
(O) No door/gate/hatch or door not opened	(8) Other (specify):
Door, Tailgate or Hatch Came Open During Collision (1) Door operational (no damage)	
<ul><li>(2) Latch/etriker failure due to damage</li><li>(3) Hinge failure due to damage</li></ul>	Window Precrash Glazing Status  39. WS \( \frac{1}{2} \) 40. LF \( \frac{2}{2} \) 41. RF \( \frac{0}{2} \) 42. LR \( \frac{2}{2} \) 43. RR \( \frac{0}{2} \)
<ul><li>(4) Door structure failure due to damage</li><li>(5) Door support (i.e., pillar, sill, roof side rail,</li></ul>	44. BL <u>45</u> . Roof <u>46</u> . Other <u>4</u>
etc.) failure due to damage (6) Latch/striker and hinge failure due to damage	(0) No glazing contact and no damage, or no glazing
(8) Other failure (specify):	(1) Fixed (2) Closed

(3) Partially opened (4) Fully opened (9) Unknown

(9) Unknown



Longitudinal

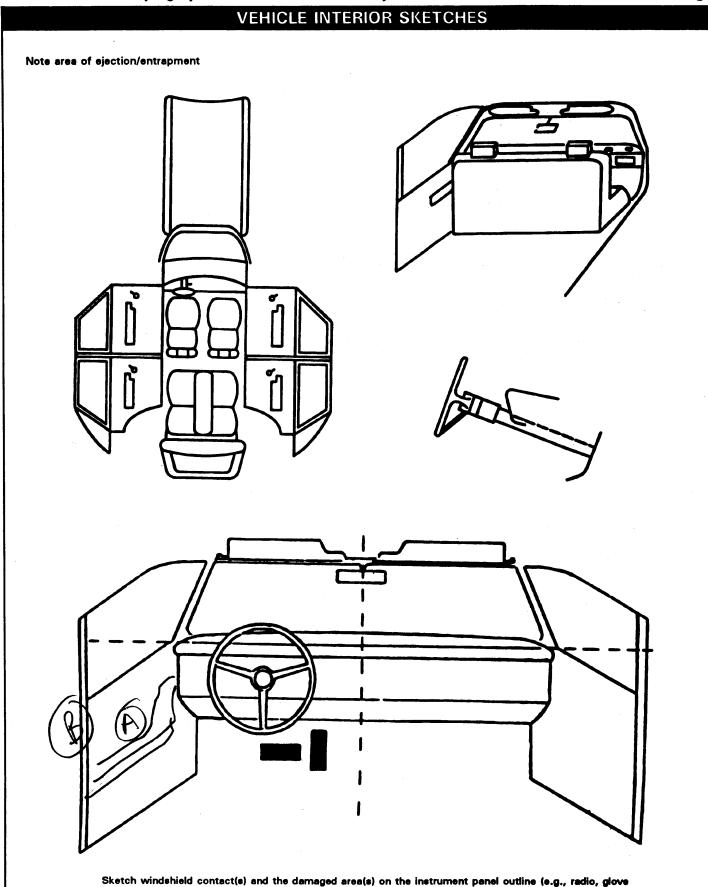


LOCATION OF INTRUSION	INTRUDED COMPONENT	(All COMPARISON VALUE	All Measurements Are In Centimeters) INTRUDED - VALUE =		INTRUSION	DOMINANT CRUSH DIRECTION	
	DOER PANEL	63	_	46	=	17	LAT
11	B puse	68	-	32_	=	36	11
	SISE RAIL	55	_	42	=	/3	11
21	Down PONEL	70	_	45	=	25	U
			_		=		
			_		=		
	ŕ		_		=		
			_		=		
			_		=		
			_		=		
			_		=		
			-		=		
			_		=	***************************************	
			_	- in	=		
	_		_	· .	=		

National Accident San		PANT AR	REA-INTRUSION:			
Note: If no intrusion	s, leave variables IV47-IV	86 blank.	INTRUDING COMPONENT			
Location of Intrusion	Intruding Magnitude Component of Intrusion	Dominant Crush Direction	Interior Components (01) Steering assembly (02) Instrument panel left			
1st 47	48. <u>07</u> 49. <u>4</u>	50. <u> </u>	(03) Instrument panel center (04) Instrument panel right (05) Toe pan (06) A (A1/A2)-pillar (07) B-pillar			
	52. <u>/</u> 0 53. <u>3</u>		(08) C-pillar (09) D-pillar (10) Door panel (side) (12) Roof (or convertible top)			
	56. <u>/0</u> 57. <u>3</u>	_	(12) Roof (of Control and Cont			
4th 59/_/	60. 13 61. 2	- <sub>62.</sub> <u>3</u>	(17) Floor pan (includes sill) (18) Backlight header (19) Front seat back (20) Second seat back			
5th 63	64 65	66	(21) Third seat back (22) Fourth seat back (23) Fifth seat back (24) Seat cushion			
6th 67	68 69	70	(25) Back door/panel (e.g., tailgate) (26) Other interior component (specify):			
7th 71	72 73	74	(27) Side panel - forward of the A (A2)-pillar (28) Side panel - rear of the A (A2)-pillar Exterior Components			
8th 75	76 77	78	(30) Hood (31) Outside surface of this vehicle (specify):  (32) Other exterior object in the environment			
9th 79	80 81	82	(specify): (33) Unknown exterior object (97) Catastrophic (98) Intrusion of unlisted component(s)			
10th 83	84 85	86	(specify): (99) Unknown			
Front Seat (11) Left (12) Middle (13) Right  Second Seat (21) Left	Fourth Seat (41) Left (42) Middle (43) Right (97) Catastroph (98) Other enc	iosed	MAGNITUDE OF INTRUSION  (1) ≥ 3 centimeters but < 8 centimeters  (2) ≥ 8 centimeters but < 15 centimeters  (3) ≥ 15 centimeters but < 30 centimeters  (4) ≥ 30 centimeters but < 46 centimeters  (5) ≥ 46 centimeters but < 61 centimeters  (6) ≥ 61 centimeters  (7) Catastrophic  (9) Unknown			
(22) Middle (23) Right Third Seat (31) Left (32) Middle (33) Right	area (spec	,	DOMINANT CRUSH DIRECTION  (1) Vertical (2) Longitudinal (3) Lateral (7) Catastrophic (9) Unknown			

31	134W	G RIM SPOKE DEFO	MIVIA		
	(A	All Messurements Are in Centimet	are)		
COMPARISON VALUE	-	DAMAGE VALUE	=	DEFORMATION	
	_	•	8		
			. =		
	_		=		
	_		8		

STEERING COLUMN  87. Steering Column Type	2	93. Location of Steering Rim/Spoke  Deformation (00) No steering rim deformation
<ul> <li>(1) Fixed column</li> <li>(2) Tilt column</li> <li>(3) Telescoping column</li> <li>(4) Tilt and telescoping column</li> <li>(8) Other column type (specify):</li> </ul>		Quarter Sections (01) Section A (02) Section B (03) Section C (04) Section D
(9) Unknown		Half Sections (05) Upper half of rim/spoke (06) Lower half of rim/spoke (07) Left half of rim/spoke
88. Blank (This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.	XX	(08) Right half of rim/spoke  (09) Complete steering wheel collapse (10) Undetermined location (99) Unknown
		INSTRUMENT PANEL
	<u> </u>	94. Odometer Reading
(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.		kilometers—Code to the nearest 1,000 kilometers (000) No odometer (001) Less than 1,500 kilometers (500) 499,500 kilometers or more (999) Unknown
90. Blank (This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.	<u> </u>	
91. Blank (This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.	<u> </u>	95. Instrument Panel Damage from Occupant Contact? (0) No (1) Yes (9) Unknown
OO Oo is Bir (Oo le Defense)	6.0	96. Knee Bolsters Deformed from Occupant Contact?
Code actual measured deformation to the nearest centimeter (00) No steering rim deformation	00	(1) Yes (8) Not present (9) Unknown
(01-14) Actual measured value in centimeters (15) 15 centimeters or more (98) Observed deformation cannot be mea (99) Unknown		97. Did Glove Compartment Door Open During Collision(s)? (0) No (1) Yes (8) Not present (9) Unknown



compartment, damage to instrument panel structure.

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

		POIN	ITS (	OF OC	CUPANT CONTAC	71			
Contact	Interior Component Contacted	ent No. If If				ysical E	vidence	Confidence Level of Contact Point	
Α	20		4-	5108	> INTRUS!	an	•	Z	
В	23	1		-510E	) n	17		2	
С									
D					NUPHYSIC	AL E	UIDENCE		
Ε					7 7				
F									
G									
Н									
1									
J									
K						···-			
L									
М									
N									
(01) Wind (02) Mirro	r		(24)		pillar (specify):	(47)	Interior loose object	eat (specify):	
(03) Sunvi	isor ing wheel rim				window glass or trame window glass including	(40)	Crilla salety seat (s		
	ing wheel hub/spol	(e	(20)		ore of the following:	(49)	Other interior object		
	ing wheel (combine des 04 and 05)	ition			ndow sill, A (A1/A2)-pillar, r roof side rail.				
(07) Steer	ing column, transm		(27)		side object (specify):	ROOF	Pour bondon		
	tor lever, other atta on equipment (e.g.,		(28)	Left side	window sill	(51)	Front header Rear header		
	air conditioner)			OIDE			Roof left side rail Roof right side rail		
	nstrument panel ar er instrument panel		RIGHT :		interior surface,	• •	Roof or convertible	top	
	instrument panel a		(50)	_	hardware or armrests	(,			
	compartment doo		(31)	Right side	hardware or armrest	FLOOR			
(13) Knee	bolster			-	A1/A2)-pillar	::	Floor (including toe	•	
of the	shield including one s following: front h 1/A2)-pillar, instrun	eader,	(33) (34)	Right B-pi Other righ	llar nt pillar (specify):	(57)	Floor or console me transmission lever, console		
	r, or steering asser		(35)	Right side	window glass or frame		Parking brake hand		
side	only)	•		Right side	window glass including	(59)	Foot controls inclu	ding parking	
	shield including one following: front h				ore of the following: ndow sill, A (A1/A2)-pillar,		brake		
A (A	1/A2)-pillar, instrum	nent panel, or			r roof side rail.	REAR			
	r (passenger side o er side air bag comp	• -	(37)	Other righ	nt side object (specify):	(60) (61)			
cove			(38)	Right side	window sill	(62)	Other rear object (	specify):	
	partment cover		INTERI	OR					
(18) Wind	shield reinforced b	y exterior	(40)	Seat, bac	k support				

(41) Belt restraint webbing/buckle

(43) Other restraint system component

(45) Air bag (use codes "16" and "17"

for injuries sustained from air bag

**CONFIDENCE LEVEL OF** 

**CONTACT POINT** 

(1) Certain

(2) Probable

(3) Possible

(9) Unknown

(42) Belt restraint B-pillar

(specify):

attachment point

(44) Head restraint system

compartment covers)

#### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

object (specify):\_

(19) Other front object (specify):

#### **AUTOMATIC RESTRAINTS** NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form. **AIR BAGS** Left Right Availability/Function Deployment R **Failure** Air Bag System Availability/Function Air Bag System Deployment Did Air Bag System Fail? (O) Not equipped/not available (O) Not equipped/not available (0) Not equipped/not available (1) Air bag (1) Air bag deployed during accident (1) No (as a result of impact) (2) Yes (specify): Non-functional (2) Air bag deployed inadvertently just (2) Air bag disconnected (specify): prior to accident (9) Unknown (3) Air bag deployed, accident sequence (3) Air bag not reinstalled undetermined (9) Unknown (4) Nondeployed (5) Unknown if deployed (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (9) Unknown **AUTOMATIC BELTS** Right Left Availability/Function F Use R Type S **Proper Use Failure Modes** Proper Use of Automatic (Passive) Belt Automatic (Passive) Belt System Automatic (Passive) Belt Failure Modes Availability/Function **During Accident** (0) Not equipped/not available (O) Not equipped/not available/not used (0) Not equipped/not available/not in use (1) 2 point automatic belts (1) Automatic belt used properly (1) No automatic belt failure(s) (2) 3 point automatic belts (2) Automatic belt used properly with (2) Torn webbing (stretched webbing not (3) Automatic belts - type unknown child safety seat included) (3) Broken buckle or latchplate Non-functional Automatic Belt Used Improperly (4) Upper anchorage separated (4) Automatic belts destroyed or (3) Automatic shoulder belt worn under (5) Other anchorage separated (specify): rendered inoperative (9) Unknown (4) Automatic shoulder belt worn behind (6) Broken retractor back (7) Combination of above (specify): Automatic (Passive) Belt System Use (5) Automatic belt worn around more (8) Other automatic belt failure (specify): (0) Not equipped/not available/destroyed than one person or rendered inoperative (6) Lap portion of automatic belt worn (9) Unknown (1) Automatic belt in use on abdomen (2) Automatic belt not in use (manually (7) Automatic lap and shoulder belt or disconnected, motorized track automatic shoulder belt used inoperative) improperly (3) Automatic belt use unknown with child safety seat (specify): (9) Unknown (8) Other improper use of automatic belt Automatic (Passiva) Belt System Type system (O) Not equipped/not available (specify): (1) Non-motorized system (9) Unknown (2) Motorized system .

(9) Unknown

#### MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Ocupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
F	Availability	4	3	4
-RST	Use	04	00	04
	Failure Modes	. /	0	/
Ş	Availability	4	3	4
SECOND	Use	00	00	00
Ň	Failure Modes	0	0	0/
T H	Availability			
1	Use			
R	Failure Modes			
Q	Availability			
<u> </u>	Use			
E R	Failure Modes			

#### Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available type unknown

#### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):
- (9) Unknown

#### Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (O1) Inoperable (specify):
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used type unknown

- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

#### Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

When a child safety seat is present enter the o the occupant's number using the codes listed	ccupant's numb	er in the fir	st row and co		
Occupant Number				$\sim$	11.00
1. Type of Child Safety Seat					<del></del>
2. Child Safety Seat Orientation					
3. Child Safety Seat Harness Usage					
4. Child Safety Seat Shield Uasge					
5. Child Safety Seat Tether Usage					
6. Child Safety Seat  Make/Model	Specify Be	low for Ea	ach Child Safe	ety Seat	
1. Type of Child Safety Seat  (0) No child safety seat (1) Infant seat (2) Toddler seat (3) Convertible seat (4) Booster seat (7) Other type child safety seat (specify)  (8) Unknown child safety seat type (9) Unknown if child safety seat used  2. Child Safety Seat Orientation (00) No child safety seat  Designed for Rear Facing for This Age/Weight (01) Rear facing (02) Forward facing (08) Other orientation (specify):		Child Safe Note: Opt (00) No ( Not Desig (01) Afte add (02) Afte (03) Chil harr (09) Unk add Designed (11) Harr (12) Harr	child safety so gned with Har er market harr ed, not used er market harr d safety seat ness/shield/tet ed or used With Harness ness/shield/tet ness/shield/tet	d Usage er Usage tre Used for Valeat ness/Shield/Tethe ness/shield/teth used, but no a ther added ess/shield/tethe s/Shield/Tether ther not used ther used	ther ler ler used fter market
Designed for Forward Facing for This Age/Weight (11) Rear facing (12) Forward facing (18) Other orientation (specify):  (19) Unknown orientation  Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight (21) Rear facing (22) Forward facing (28) Other orientation (specify):  (29) Unknown orientation  (99) Unknown if child safety seat used	6.	Unknown (21) Harr (22) Harr (29) Unk (99) Unk	If Designed \ ness/shield/te ness/shield/te nown if harne nown if child ety Seat Make	ther used ess/shield/tethe safety seat us	shield/Tether or used ed

### HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F	Head Restraint Type/Damage	_3	0	3
R S T	Seat Type	06	06	06
	Seat Performance	6		/
	Seat Orientation	/	1	
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	/		/
	Seat Orientation	/	<i>J</i>	/
Т	Head Restraint Type/Damage			
Ĥ	Seat Type			
Ŕ	Seat Performance			
D	Seat Orientation			
0	Head Restraint Type/Damage			
Ť	Seat Type			
E	Seat Performance			
R	Seat Orientation			

Head	Res	traint	Type/Damage	by	Occupant	at	This
Occur	ant	Positi	ion				

- (0) No head restraints
- (1) Integral - no damage
- (2) Integral damaged during accident
- (3) Adjustable - no damage
- Adjustable damaged during accident (4)
- Add-on no damage (5)
- Add-on damaged during accident (6)
- (8) Other Specify):
- (9) Unknown

#### Seat Type (this Occupant Position)

- Occupant not seated or no seat (00)
- **Bucket** (01)
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08)Pedestal (i.e., column supported)
- (09) Other seat type (specify):
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

#### Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify:
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):

  LSIDE TOP ACT

  (7) Combination of above/(specify):
- (8) Other (specify):
- (9) Unknown

#### Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):
- (9) Unknown

#### DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

omplete the following if the research the vehicle. Code the appropriate JECTION No [1] Yes [ Describe indications of ejection and	e data on the ( 	Occpant Assess	ment For	<b>m.</b>	ed from or entrappe			
Occupant Number								
Ejection								
(Note on Vehicle Interior Sketch) Ejection Area								
Ejection Medium								
Medium Status								
jection (1) Complete ejection (1) Partial ejection (3) Ejection, Unknown degree (9) Unknown  jection Area (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear	(9) Unknown (1) Door/ (2) Nonfi	(7) Roof (8) Other area (e.g., back of pickup, etc.) (specify):  (9) Unknown  Ejection Medium (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify):			(5) Integral structure (8) Other medium (specify):  (9) Unknown  Medium Status (Immediately Prior to Impact) (1) Open (2) Closed (3) Integral structure (9) Unknown			
ENTRAPMENT No [ 1/ ] Yes Describe entrapment mechanism: _	s [ ]							
Component(s):								

Page 4

#### National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

HEAD RESTRAINT AND SEAT EVALUATION 6 27. Seat Performance (this Occupant Position) 25. Head Restraint Type/Damage by Occupant at This Occupant Position (0) Occupant not seated or no seat (0) No head restraints (1) No seat performance failure(s) (1) Integral—no damage (2) Seat adjusters failed (2) Integral—damaged during accident (3) Seat back folding locks or "seat back" failed (3) Adjustable—no damage (4) Seat track/anchors failed (4) Adjustable—damaged during accident (5) Deformed by impact of occupant (6) Deformed by passenger compartment intrusion (5) Add-on—no damage (6) Add-on-damaged during accident (specify): L SIDE TUTRUS/IN Other (specify): (9) Unknown (7) Combination of above (specify): (8) Other (specify): 06 (9) Unknown 26. Seat Type (this Occupant Position) (00) Occupant not seated or no seat (01) Bucket (02) Bucket with folding back (03) Bench (04) Bench with separate back cushions (05) Bench with folding back(s) (06) Split bench with separate back cushions (07) Split bench with folding back(s) (08) Pedestal (i.e., column supported) (09) Other seat type (specify): (10) Box mounted seat (i.e., van type) (99) Unknown

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Form Approved O.M.B. No. 2127-0021

National Highway Traffic Safety
Administration

OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

8 |

3. Vehicle Number

01

2. Case Number - Stratum

038K

4. Occupant Number

01

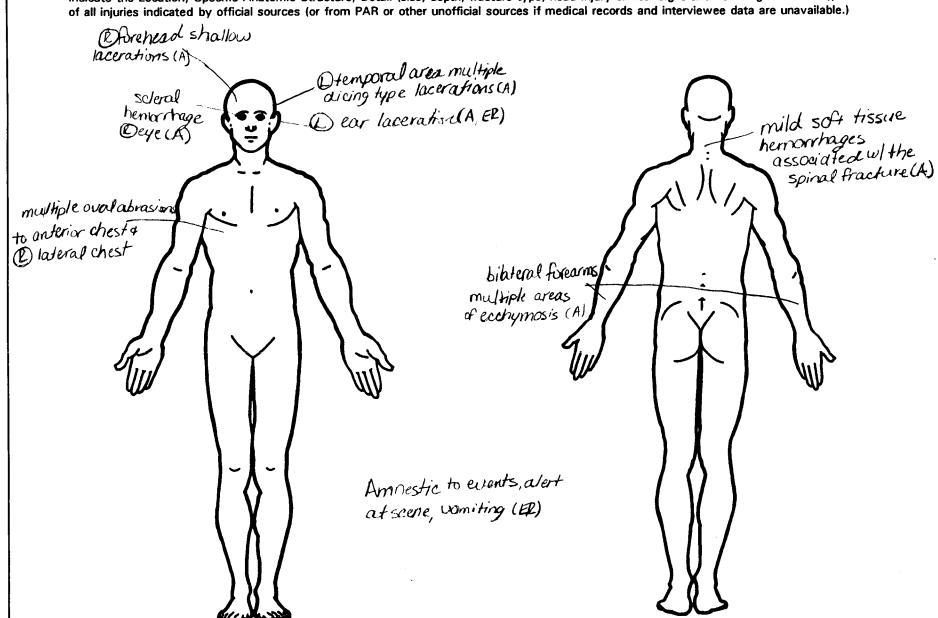
#### INJURY DATA:

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

				0.I.C	A.I.S			_	Injury		Occupant
	Source of Injury	Body	Type of Anatomic		Level of	A.I.S.		Injury	Source Confidence	Direct/ Indirect	Area Intrusion
	Data	Region	Structure	_	Injury	Severity	Aspect	Source	Level	Injury	Number
1st	5. /	6. <u>7</u>	7. <u>9</u>	8. <u>04</u>	9. <u>OZ</u>	10. 🖊	11. 2	12. <u>2</u> <u>0</u>	13. 2	14. 🗘	15. <u>0</u> 3
2nd	16. 1	17. <u>A</u>	18. 9	19. <u><i>Q</i></u>	20. <u>0 a</u>	21. 🖊	22. 7	23. <u>9</u> /	24. 2	25. 3	26. <u>0 0</u>
3rd	27	28	29. <u>9</u>	30. <u>06</u>	31. <u>0 2</u>	32. /_	33. <u>A</u>	34. <u>9 /</u>	35. /	363	37. <u>00</u>
=4th	38. 👤	39. <u>8</u>	40. <u>5</u>	41. <u>/ 8</u>	42. <u>08</u>	43. 3	44.2	45. <u>2 /</u>	46. 1	47. <u>/</u>	48. <u>0</u> 3
5th	49. 1	50. <u>H</u>	<sub>51.</sub> <u>9</u>	52. <u>0 2</u>	53. <u>0</u> 2	54. <u>J</u>	55. 🖊	56. <u>4</u> <u>/</u>	57. 2	58	59. <u>00</u>
6th	60. <u>/</u>	61. <u>4</u>	62. <u>4</u>	63. <u>/ 4</u>	64. <u>0</u> 6	65. <u>3</u>	66. <u>2</u>	67. <u>20</u>	68. 🗘 . 6	s9. <u> </u>	70. <u>0</u> 3
7th	71. 🗘	72. <u>4</u>	73. <u>5</u>	74. <u>42</u>	75. <u>42</u>	76. <u>5</u>	77. <u>3</u>	78. <u>2 0</u>	79. 🖊 8	30. <u>/</u>	81. <u>23</u>
8th	82. <u>/</u>	83. <u>5</u>	84. <u>4</u>	85. <u>/ 8</u>	86. <u>À</u> À	87. <u>A</u>	88/	89. 20	90. 2	91. <u>/</u>	92. <u>03</u>
9th	93. 🖊	94. 5	95. 4	96. <u>42</u>	97. <u>2</u> 2	98. <u>Z</u>	99. <u>2</u>	100. <u>20</u>	101. 7 10	D2. <u>/</u> 1	оз. <u>03</u>
10th	104. 🖊	105. 7 1	06. <b>_9</b> 1	07. <u>04</u>	103. <u>02</u>	109. 🖊	110. 🖊	111.06	112. 3 11	13. 🗘 1	14. <u>00</u>

3	Source of Injury Data	Body Region	Type of Anatomic Structure	O.I.CA Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
11th	<u>1</u>	<u>(</u>	<u>5</u>	04	16	જ	7	<u> 20</u>	2	2	<u>03</u>
12th	1	<u>\$</u>	<u>5</u>	<u>30</u>	00	<u>3</u>	5	21	1.	1	03
13th	1	<u>8</u>	<u>5</u>	उत	<u>00</u>	2	5	21		1	<u>03</u>
14th	L	4	4	10	10	3	4	<u>20</u>	1	1	<u>0</u> 3
15th	<u>/</u>	<u>a</u>	9	06	<u>.00</u>		2	92	2	3	00
16th				<del></del>	<del></del>		_				
17th			_		<del></del>	_		<del></del>			
18th			_								
19th	_										
20th								<del></del>	<del></del>		
21st											
22nd	<del></del>				******				_		
23rd			_			_					
24th		_			<del></del>						<del></del>
25th											

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source



#### SOURCE OF INJURY DATA (25) Left side window glass or frame (61) Backlight storage rack, door, etc. OFFICIAL (26) Left side window glass including (62) Other rear object (specify): one or more of the following: (1) Autopsy records with or without hospital/ frame, window sill, A (A1/A2)-pillar, medical records (2) Hospital/medical records other than B-pillar, or roof side rail. EXTERIOR of OCCUPANT'S VEHICLE (27) Other left side object (specify): (85) Hood emergency room (e.g., discharge summary) (66) Outside hardware (e.g., outside (28) Left side window sill (3) Emergency room records only (including mirror, antenna) associated X-rays or other lab reports) (67) Other exterior surface or tires (4) Private physician, walk-in or emergency RIGHT SIDE (specify): (30) Right side interior surface, (68) Unknown exterior objects excluding hardware or armrests UNOFFICIAL Right side hardware or armrest EXTERIOR OF OTHER MOTOR VEHICLE Right A (A1/A2)-pillar (70) Front bumper (5) Lay coroner report (32) (33) Right B-pillar (6) E.M.S. personnel (71) Hood edge (34) Other right pillar (specify): (72) Other front of vehicle (specify): (7) Interviewee (8) Other source (specify): (35) Right side window glass or frame (73) Hood (9) Police Right side window glass including (74) Hood ornament one or more of the following: (75) Windshield, roof rail, A-pillar frame, window sill, A (A1/A2)-pillar, (76) Side surface **INJURY SOURCE** B-pillar, or roof side rail. (77) Side mirrors (78) Other side protrusions (specify) **FRONT** (37) Other right side object (specify): (01) Windshield (38) Right side window sill (79) Rear surface (O2) Mirror (80) Undercarriage (03) Sunvisor (04) Steering wheel rim INTERIOR (81) Tires and wheels (05) Steering wheel hub/spoke (40) Seat, back support (82) Other exterior of other motor vehicle (06) Steering wheel (combination (41) Belt restraint webbing/buckle (specify): of codes 04 and 05) (42) Belt restraint B-pillar or door frame (07) Steering column, transmission attachment point (83) Unknown exterior of other motor vehicle selector lever, other attachment (43) Other restraint system component OTHER VEHICLE OR OBJECT IN THE (08) Add on equipment (e.g., CB, tape (specify): (44) Head restraint system **ENVIRONMENT** deck, air conditioner) (09) Left instrument panel and below (45) Air bag (use codes "16" and "17" for injuries (84) Ground sustained from air bag compartment covers) (85) Other vehicle or object (specify) (10) Center instrument panel and below (46) Other occupants (specify): (11) Right instrument panel and below (86) Unknown vehicle or object (12) Glove compartment door (13) Knee bolster (47) Interior loose objects (14) Windshield including one or more (48) Child safety seat (specify): NONCONTACT INJURY of the following: front header, (90) Fire in vehicle (49) Other interior object (specify): A (A1/A2)-pillar, instrument panel, (91) Flying glass mirror, or steering assembly (driver (92) Other noncontact injury source side only) (specify): (93) Air bag exhaust gases (15) Windshield including one or more ROOF (50) Front header (97) Injured, unknown source of the following: front header. (51) Rear header A (A1/A2)-pillar, instrument panel, or mirror (passenger side only) (52) Roof left side rail INJURY SOURCE CONFIDENCE (16) Driver side air bag compartment cover (53) Roof right side rail LEVEL (17) Passenger side air bag compartment cover (54) Roof or convertible top (1) Certain Windshield reinforced by exterior object (18)Probable (2) (specify): **FLOOR** (3) Possible (19) Other front object (specify): (56) Floor (including toe pan) (8) Unknown (57) Floor or console mounted transmission lever, including LEFT SIDE console DIRECT/INDIRECT INJURY (58) Parking brake handle (20) Left side interior surface. Direct contact injury (59) Foot controls including parking excluding hardware or armrests (2) Indirect contact injury (21) Left side hardware or armrest brake Noncontact injury (3) (22) Left A (A1/A2)-pillar (7)Injured, unknown source (23) Left B-pillar (24) Other left piller (specify): (60) Backlight (rear window) OCCUPANT INJURY CLASSIFICATION **Body Region** Specific Anatomic Structure Spine (02) Cervical

- Head
- (2) (3) (4) (5) Nack
- Thorax Abdomen
- (6) Spine
- Upper Extremity (7)
- Lower Extremity
- Unspecified

#### Type of Anatomic Structure

- Whole Area (2) Vessels
- Nerves
- (4) Organs (includes muscles/
- ligaments) Skeletal (includes joints)
- Head LOC
- Skin

- Whole Area (02) Skin Abrasion (04) Skin Contusion
- (06) Skin Laceration
- (08) Skin Avulsion
- (10) Amoutation
- Burn (20)
- Crush
- (40) Degloving
- (60)
- Injury NFS Trauma, other than mechanical
- Head LOC (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

- (04) Thoracic
- (06) Lumbar
- Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

#### Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, OO is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

#### Abbreviated Injury Scale

- Minor injury
- Moderate injury (2)
- (3) Serious injury
- (4) Severe injury
- Critical injury (5)
- Maximum (untrestable)
- (6) (7) Injured, unknown severity

#### Aspect

- Right
- Left Bilateral (3) (4)
  - Central
- (6) Anterior Posterior
- (6) (7) Superior
- (8) Inferior
- Unknown Whole region

## OFFICIAL INJURY DATA - SKELETAL INJURIES

#### Restrained?

—<sup>№</sup> 7

\_\_\_ Yes

Blood Alcohol Level (mg/dl)

 $BAL = \bigcirc$ 

Glasgow Coma Scale Score

GCSS = \_\_\_\_

Units of Blood

Units = \_\_\_\_\_\_

#### Arterial Blood Gases

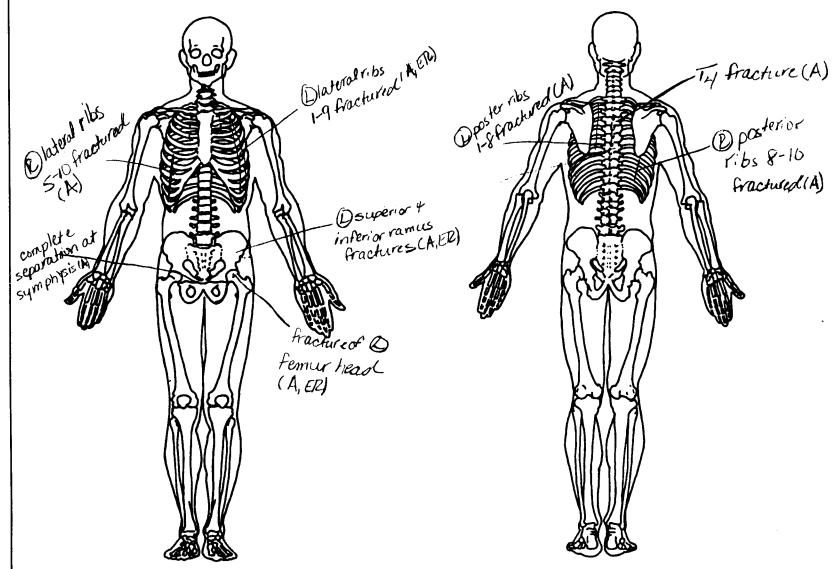
pH = 7.25

PO<sub>2</sub>= 194

PCO, 38

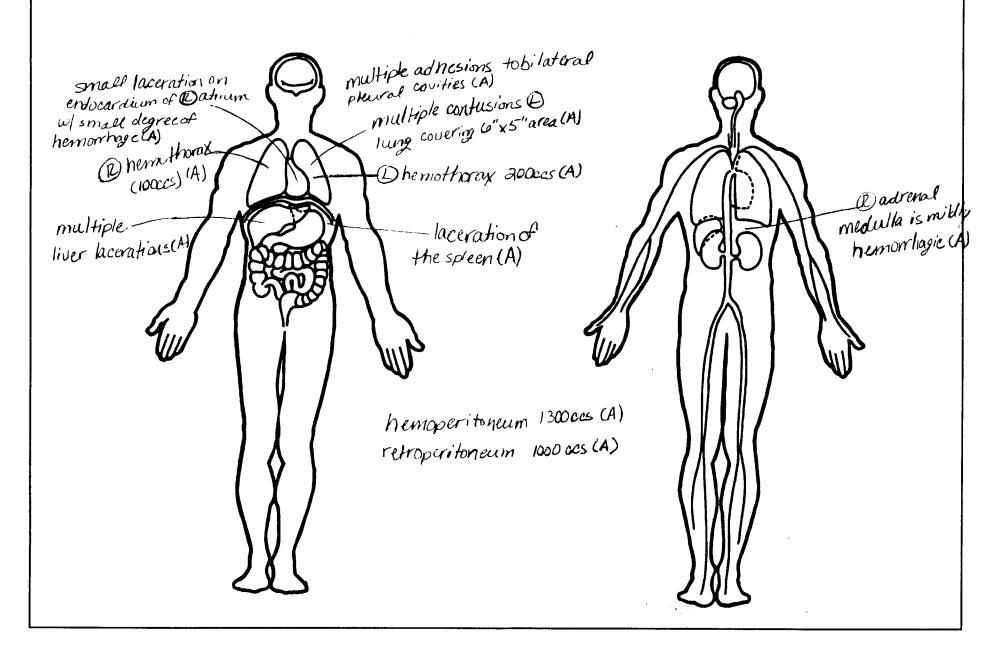
нсо, \_\_\_\_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



#### OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



ta System: Occupant Assessment Form Page
ND SEAT EVALUATION
27. Seat Performance (this Occupant Position) (0) Occupant not seated or no seat (1) No seat performance failure(s) (2) Seat adjusters failed (3) Seat back folding locks or "seat back" failed (4) Seat track/anchors failed (5) Deformed by impact of occupant (6) Deformed by passenger compartment intrusion (specify):
(7) Combination of above (specify):
(8) Other (specify):
(9) Unknown

Administration

U.S. Department of Transportation National Highway Traffic Safety BEST AVAILABLE COPY

Form Approved O.M.B. No. 2127-0021

**OCCUPANT INJURY FORM** 

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

81

3. Vehicle Number

01

2. Case Number - Stratum

038K

4. Occupant Number

02

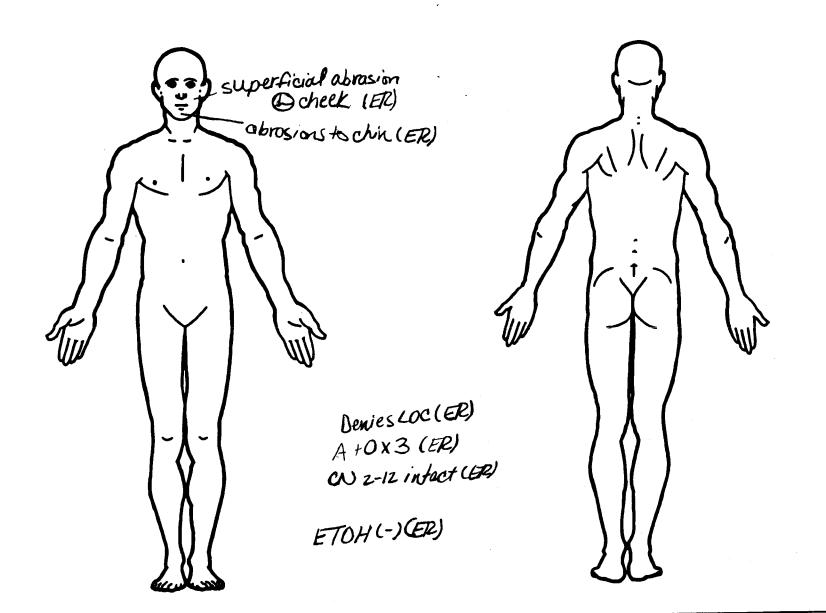
### INJURY DATA.

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

				0.1.0	A.I.S				Injury		Occupant
	Source of Injury	Body	Type of Anatomic	Specific Anatomic	Level of	A.I.S.		Injury	Source Confidenc	Direct/ e Indirect	
	Data	Region	Structure		Injury	Severity	Aspect	Source	Level	Injury	Number
1st	5. <u>3</u>	6. <u>2</u>	7. <u>9</u>	8. <u>02</u>	9. <u>0</u> 2	10. <u>/</u>	11. <u>2</u>	12. 46	13. 2	14	15. <u>00</u>
2nd	16.3	17. <u>A</u>	18.9	19. <u>02</u>	20. <u>O a</u>	21	22. <u>8</u>	23. <u>46</u>	24. 2	25. 1	<sub>26.</sub> <u>00</u>
3rd	27.7	28. 7	29. 9	30. <u>0 4</u>	31. <u>0 a</u>	32. <u>/</u>	33. /	34. <u>3 0</u>	35. 2	36	37. <u>00</u>
=4th	38. <u>7</u>	3 <b>9</b> . <u>\$</u>	40. <u>9</u>	41.04	42. <u>O</u> <u>2</u>	43	44. /	45. <u><b>3</b> 0</u>	462	47. 1	48. <u>00</u>
5th	49. 7	50. <u>\$</u>	51. <u>9</u>	52. <u>04</u>	53. <u>O A</u>	54. 🖊	55. <u>2</u>	56. <u>3 0</u>	57. 2	58	59. <u>OO</u>
6th	60	61	62	63	64	65	66	67	68	69	70
7th	71	72	73	74	75	76	77	78	79	80	81
8th	82	83	84	85 <del></del>	86	87	88	89	90	91	92
9th	93	94	95	96	97	98	99	100	101	102	03
10th	104	105	106 1	07	108	109	110	111	112	113 '	114

				OCCI	JPANT I	NJURY	DATA-				
	Source		Type of	O.I.CA					Injury Source	Direct/	Occupant Area Intrusion
	of Injury Data	Body Region	Anatomic Structure	Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Confidence Level	Indirect Injury	Number
11th											
12th	*****										
13th					<del></del>	-					
14th	_						***************************************				
15th		هفيسه	*******				-				
 16th											
17th					-			<del></del>			
== 18th	_					•			_		<del></del> _
19th	_		_			_	_				
20th	_										
21st								<del></del>			<del></del>
22nd					****				_		
23rd											
24th	_				******	endange.		<del></del>			
25th					<del></del>					خببت	

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



Page

### SOURCE OF INJURY DATA **OFFICIAL**

- (1) Autopsy records with or without hospital/ medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify):
- (9) Police

### **INJURY SOURCE**

### **FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., C8, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify):
- (19) Other front object (specify):

### LEFT SIDE

- (20) Left side interior surface excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify):

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify):
- (28) Left side window sill

### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify):
- (38) Right side window sill

### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42)Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- Other occupants (specify): DRIVER
- (47) Interior loose objects
- (48) Child safety seat (specify):
- (49) Other interior object (specify):

### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### **FLOOR**

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

### REAR

(60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

### EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- Other exterior surface or tires (specify):
- (68) Unknown exterior objects

### **EXTERIOR OF OTHER MOTOR VEHICLE**

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify):
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify)
- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify):
- (83) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify)
- (86) Unknown vehicle or object

### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify):
- (93) Air bag exhaust gases
- (97) Injured, unknown source

### INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

### **DIRECT/INDIRECT INJURY**

- Direct contact injury
- Indirect contact injury
- (3) Noncontact injury
- Injured, unknown source

### OCCUPANT INJURY CLASSIFICATION

### **Body Region**

- Head
- (2) Face
- (3) Neck Thorax
- Abdomen (6) (6)
- Spine
- **Upper Extremity**
- (8) Lower Extremity Unepacified
- Whole Area Vessels
- (3) Nerves
- 141 Organs (includes muscles/ ligaments)

Type of Anatomic Structure

- (6) Skeletal (includes joints) (6) Head - LOC
- (9) Skin

### Specific Anatomic Structure

- Whole Area (02) Skin Abrasion (04) Skin Contusion (06) Skin Laceration
- Skin Avulsion (10) Amputation
- Burn (20)
- (30) Crush
- (40) Degloving
- (50) Injury - NFS Trauma, other than mechanical

- Head LOC (02) Length of LOC
- (04, 06, 08) Level of Consciousness

- (02) Cervical (04) Thoracic
- (06) Lumbar Vessels, Nerves, Organs, Bones,

# Joints are assigned consecutive two digit numbers beginning with 02 Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

### Abbreviated Injury Scale

- Minor injury
- (2) Moderate injury
- (3) Serious injury (4) Severe injury
- Critical injury
- (6) Maximum (untreatable) (7) Injured, unknown severity

## Aspect

- Right
- Left Bilateral
- Central
- Anterior
- (6) Posterior (7) Superior
- Unknown Whole region

# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

No

XYes

(ER)

Blood Alcohol Level (mg/dl)

BAL = O

Glasgow Coma Scale Score

$$GCSS = \frac{15}{(ER)}$$

Units of Blood Given

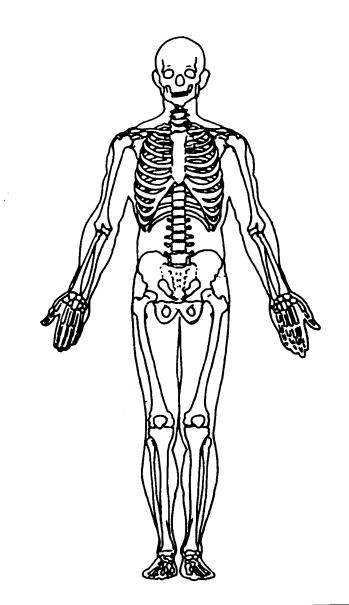
Units = \_\_\_\_\_

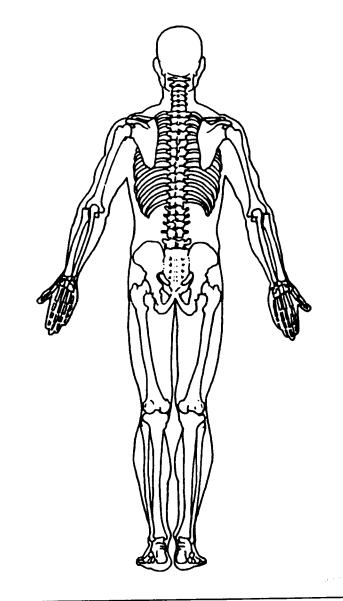
Arterial Blood Gases

PO<sub>2</sub>=

нсо,

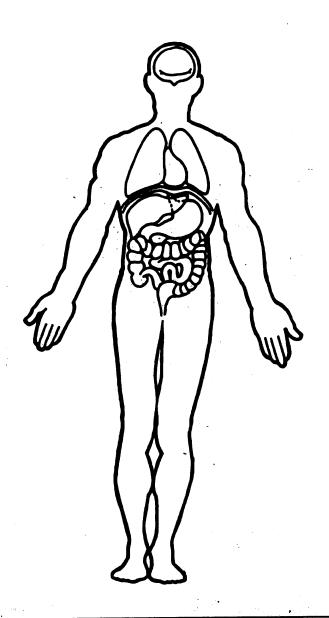
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

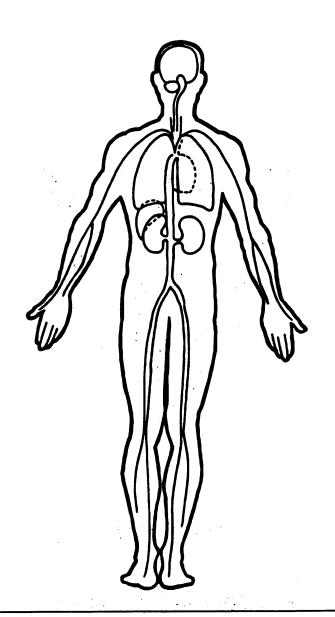




# OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





### National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

954,81-038K

	OCCUPANT RELATED	24. Rollover (no overturning)
	Driver Presence in Vehicle (0) Driver not present (1) Driver present (9) Unknown  Number of Occupants This Vehicle (00-96) Code actual number of occupants for this vehicle (97) 97 or more (99) Unknown	(0) No rollover (no overturning)  Rollover (primarily about the longitudinal axis) (1) Rollover, 1 quarter turn only (2) Rollover, 2 quarter turns (3) Rollover, 3 quarter turns (4) Rollover, 4 or more quarter turns (specify):  ———————————————————————————————————
18.	Number of Occupant Forms Submitted 03	(9) Rollover (overturn), details unknown
	VEHICLE WEIGHT ITEMS	OVERRIDE/UNDERRIDE (THIS VEHICLE)
19.	Vehicle Curb Weight	25. Front Override/Underride (this Vehicle)
	10 kilograms. (045) Less than 450 kilograms (610) 6,100 kilograms or more	26. Rear Override/Underride (this Vehicle)
	(999) Unknown	(0) No override/underride, or not an end-to-end impact
20.	Vehicle Cargo Weight Code weight to nearest	Override (see specific CDC) (1) 1st CDC (2) 2nd CDC (3) Other not automated CDC (specify):
	10 kilograms. 0707 £ (000) Less than 5 kilograms (450) 4,500 kilograms or more (999) Unknown, 400 lbs X .4536 =, 81 kgs	Underride (see specific CDC) (4) 1st CDC (5) 2nd CDC (6) Other not automated CDC (specify):
	RECONSTRUCTION DATA	(7) Medium/heavy truck or bus override (9) Unknown
21.	Towed Trailing Unit (0) No towed unit	(o) qualities
	(1) Yes—towed trailing unit (9) Unknown	HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V
22.	Documentation of Trajectory Data for This Vehicle (0) No (1) Yes	Values: (000)-(359) Code actual value (997) Noncollision (998) Impact with object (999) Unknown
23.	Post Collision Condition of Tree or Pole (For Highest Delta V) (0) Not collision (for highest delta V) with tree or pole (1) Not damaged (2) Cracked/sheared (3) Tilted <45 degrees (4) Tilted ≥45 degrees (5) Uprooted tree (6) Separated pole from base (7) Pole replaced (8) Other (specify):	27. Heading Angle For This Vehicle OOO  28. Heading Angle For Other Vehicle 270
	(9) Unknown	

National Accident Sampling System-Crashworthiness Data System: General Vehicle Form **OTHER DATA** 61. Rollover Initiation Object Contacted 56. Driver's Zip Code 62. Location on Vehicle Where Initial Principal (00000) Driver not present Tripping Force Is Applied (00001) Driver not a resident of U.S. or territories Code actual 5-digit zip code (O) No rollover (99999) Unknown (1) Wheels/tires (2) Side plane (3) End plane 57. Driver's Race/Ethnic Origin (4) Undercarriage (0) Driver not present (5) Other location on vehicle (specify): (1) White (non-Hispanic) (2) Black (non-Hispanic) (8) Non-contact rollover forces (specify): (3) White (Hispanic) (4) Black (Hispanic) (9) Unknown (5) American Indian, Eskimo or Aleut (6) Asian or Pacific Islander (8) Other (specify): 63. Direction of Initial Roll (9) Unknown (O) No rollover (1) Roll right - primarily about the longitudinal axis (2) Roll left - primarily about the longitudinal axis 58. Vehicle Special Use (This Trip) (0) No special use (5) End-over-end (i.e., primarily about the lateral (1) Taxi axis) (2) Vehicle used as school bus (9) Unknown roll direction (3) Vehicle used as other bus (4) Military (5) Police (6) Ambulance (7) Fire truck or car PRECRASH DATA (8) Other (specify): 01 (9) Unknown 64. Pre-Event Movement (Prior to Recognition of Critical Event) **ROLLOVER DATA** (01) Going straight (02) Slowing or stopping in traffic lane If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank. (03) Starting in traffic lane If GV24 (Rollover) = 0, then GV59-GV63 must equal 0. (04) Stopped in traffic lane If GV24 = 9, then GV59-GV63 must equal 9. (05) Passing or overtaking another vehicle (06) Disabled or parked in travel lane 59. Rollover Initiation Type (07) Leaving a parking position (0) No rollover (08) Entering a parking position (1) Trip-over (09) Turning right (2) Flip-over (10) Turning left (3) Turn-over (11) Making a U-turn (4) Climb-over (12) Backing up (other than for parking position) (5) Fall-over (13) Negotiating a curve (6) Bounce-over (14) Changing lanes (7) Collision with another vehicle (15) Merging (8) Other rollover initiation type specify): (16) Successful avoidance maneuver to a previous critical event (9) Unknown rollover initiation type (97) Other (specify): (98) No driver present 60. Location of Rollover Initiation (99) Unknown (O) No rollover (1) On roadway (2) On shoulder-paved (3) On shoulder—unpaved (4) On roadside or divided trafficway median (9) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over fall-over
- (33) Jackknife

### Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq$  10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify):

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify):
- (69) Unknown fixed object

### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify):
- (89) Unknown nonfixed object
- (98) Other event (specify):
- (99) Unknown event or object



U.S. Department of Transportation

National Highway Traffic Safety

# **EXTERIOR VEHICLE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

Administration		LA	I LITTOR V	, L. III	<u> </u>	<u> </u>		CRASH	NORTHIN	ESS DATA	SYSTEM
1. Primar	y Sampling Unit Nur		<u>81</u>	- i ·	Vehicle	Numbe	er				2
2. Case N	Number - Stratum	<u> </u>	38 K	-		4					
		\	/EHICLE ID	ENTIF	FICATI	ON					
VIN <u>/ /</u>	ETHF.	25 <u>L</u>	3 D			Medical Communication of the C		-		ear 8	3
Vehicle Ma	ike (specify):		ord	_ '	Vehicle I	Model (s	pecify):	+-	<u> 25 c</u>	2 F	<u>u</u>
			LO	CATO	R						
	end of the damage amaged axle for side		t to the vehic	cie long	gitudinal	center	line or b	umper o	orner fo	or end in	npacts
	mpact No.		of Direct Dar	nage			Lo	cation	of Field	L	
			2 F Bump		RNER		CORN	ER 70	Cer	entel	,
····			7								
				. <u>-</u>							
		CRUS	SH PROFIL	E IN C	CENTIN	/IETER	S				
	dentify the plane at sill, etc.) and label ac				taken (	e.g., at	bumpei	, above	bumpe	r, at sill	, above
ľ	Measure and docume	ent on the v	ehicle diagra	m the	location	of max	imum cı	ush.			
,	Measure C1 to C6 fr	om driver to	passenger :	side in	front or	rear im	pacts ar	nd rear t	o front	in side	
1 .	mpacts.	0 0	process s		.,						
į į	Free space value is o	defined as th	ne distance b	etweer	n the ba	seline a	nd the d	original i	ody co	ntour ta	ken at
t t	he individual C locations the taper, etc. Rec	tions. This ord the valu	may include e for each C	the fol -measu	lowing: rement	bumper and ma	ilead, bi ximum (	umper ta crush.	aper, sid	de protri	usion,
	Jse as many lines/co								5	49	
Specific		Direct D								1	
Impact Number	Plane of Impact C-Measurements	Width (CDC)	Max Crush	Field L	C,	C <sub>2</sub>	C <sub>3</sub>	C₄	C <sub>5</sub>	C <sub>6</sub>	±D
	FRONT BUMPER		C-6		14	4	4	3.5	3	1	+23.5
47	FREE SPACE	11		11	10	0	0	0	3	10	
	FINAL	143	12	182	4	4	4	3,5	2	16	+23.5
					ļ		<u> </u>				
					<u> </u>			<u></u>		<u> </u>	
			FO	-17	Ruma	ore	640	2/5	FX	Lude	
			1 / 24	:	1	~	<u> </u>			-400	
				<del></del>							

# ORIGINAL SPECIFICATIONS WORK SHEET

						2 2 6
Wheelbase	_133	inches	x	2.54	=	338 cm
Overall Length	<u>208.3</u>	inches	X	2.54	=	529 cm
Maximum Width	77.2	inches	X	2.54	=	
Curb Weight	3,971	pounds	x	.4536	=	$\underline{\hspace{1cm}}/\hspace{-1.5mm},\underline{\hspace{1cm}}8\underline{\hspace{1cm}}\underline{\hspace{1cm}}0\underline{\hspace{1cm}}/\hspace{-1.5mm}$ kg
Average Track		inches	x	2.54	=	cm
Front Overhang	_ 28.6	inches	X	2.54	-	0.73 cm
Rear Overhang	_ 46.7	inches	x	2.54	=	<u>/ / 9</u> cm
Undeformed End Width			X	2.54	=	$\underline{/90}$ cm
Engine Size: cyl./displ.	<u>v-8</u>	сс	X	.001	=	L
			X	.0164	=	L

	VEHICLE DAMAGE SKETCH	
TIRE—WHEEL DAMAGE  a. Rotation physically b. Tire restricted deflated  RF	ORIGINAL SPECIFICATIONS  Wheelbase 338 cm  Overall Length 529 cm  Maximum Width 196 cm  Curb Weight 1801 kg  Average Track 173.5 cm  Front Overhang 73 cm  Rear Overhang 115 cm  Undeformed End Width 190 cm  Engine Size: cyl./displ. U8- L	WHEEL STEER ANGLES (For locked front wheels or displaced rear exles only)  RF ±
177	MEASUREMENTS IN CENTIMETERS	170
	POST-CRASH  Stringline 73	7/5 Bumper corner 7/7 Stringline
	Bumper corner //5 338 Stringline /// 7	Bumper corner  13 Stringline
NOTES: Sketch new perimeter and cross ha	REAL STEP Bump & / / Etch direct damage on all views. Ar	notate observations which might be useful in
reconstructing the accident (e.g., gr	ass in tire bead, direction of striations, scuff on sidewalls, etc.). If pu	alling trailer, sketch type of trailer and damage
received on the back of this page.  Annotate any damage caused by ex	ctrication such as component removal by torching, prying, or hydrau	lic shears.

HS Form 435B (2g) (1/93)

53 57

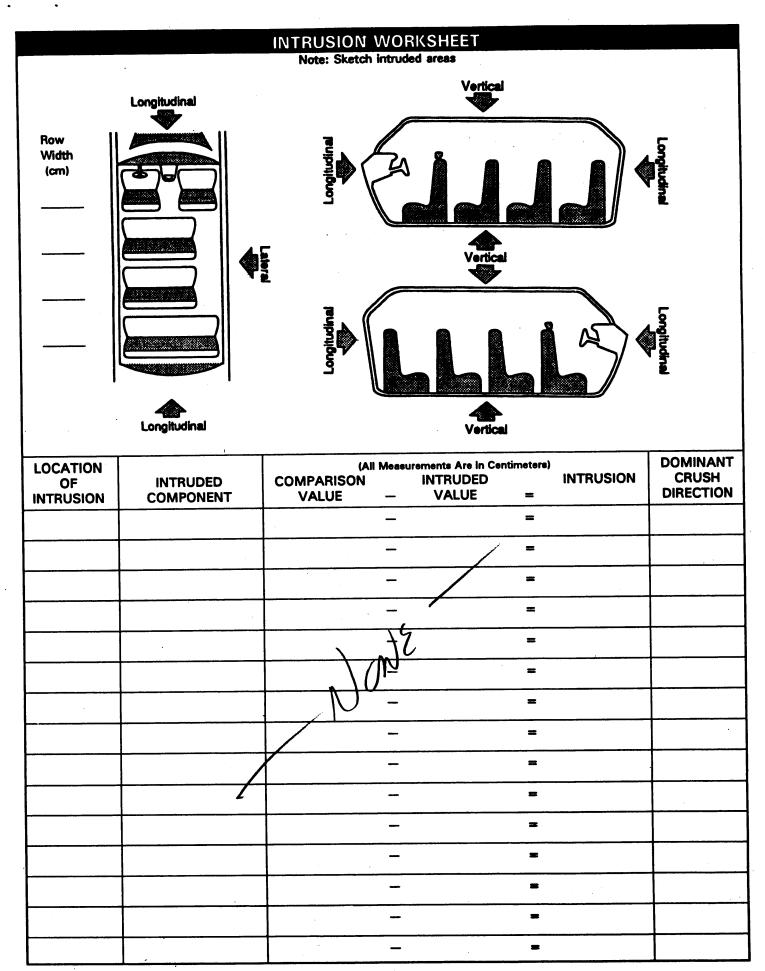
170

508

582

	CDC M	ORKSHEE	T			
COD	ES FOR O	BJECT CONT	ACTED			
CODE  (01-30) — Vehicle Number  Noncollision (31) Overturn — rollover (32) Fire or explosion (33) Jackknife (34) Other intraunit damage (specify):  (35) Noncollision injury (38) Other noncollision (specify):  (39) Noncollision — details unknown  Collision With Fixed Object (41) Tree (≤ 10 cm in diameter) (42) Tree (> 10 cm in diameter) (43) Shrubbery or bush (44) Embankment  (45) Breakaway pole or post (any diameter) (50) Pole or post (≤ 10 cm in diameter) (51) Pole or post (> 10 cm but ≤ 30 diameter) (52) Pole or post (> 30 cm in diameter) (53) Pole or post (diameter unknown)	neter) er) cm in er)	(57) (58) (59) (60) (61) (62) (63) (64) (68) (69) Collisio (71) (72) (73) (74) (75) (76) (77) (78) (88) (89)	Fence Wall Building Ditch or of Ground Fire hydra Curb Bridge Other fixe Unknown on with Non Motor ve Pedestria Cyclist of Other non Vehicle of Animal Train Trailer, do Other no	ed object (so fixed object of the fixed object (so fixed object object of the fixed ob	ct ct ctransport r conveyance l in transpor ct (specify):	
(54) Concrete traffic barrier (55) Impact attenuator	1	(99)	Unknowi	n event or o	bject	
(56) Other traffic barrier (includes gua (specify):	ardrail)	-				
DEFORMATIO	N CLASS	IFICATION BY	EVENT N	UMBER		
<del></del>	ncremental Value of Shift	(3) L Deformation Location	(4) Specific ongitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01 01 +300	00	F	$\nearrow$	$\underline{\mathcal{E}}$	w	0/
				<del></del>		
		,				
		<del></del>				

ational Highway Traffic Safety dministration	INTERIOR VE	HICLE FORM NATIONAL ACCIDENT SAMPLING SYSTE CRASHWORTHINESS DATA SYSTE	
	81	GLAZING	
1. Primary Sampling Unit Number	138K	Glazing Damage from Impact Forces	
2. Case Number - Stratum _		15. WS <u>O</u> 16. LF <u>O</u> 17. RF <u>O</u> 18. LR <u>8</u> 19. RR <u>8</u>	
3. Vehicle Number	02	20. BL 21. Roof 8 22. Other O CANOPY	
INTEGRITY		(0) No glazing damage from impact forces	
4. Passenger Compartment Integrity (00) No integrity loss	y <u>00</u>	(2) Glazing in place and cracked from impact forces (3) Glazing in place and holed from impact forces (4) Glazing out-of-place (cracked or not) and not holed from impact forces	
Yes, Integrity Was Lost Through (01) Windshield (02) Door (side)		(5) Glazing out-of-place and holed from impact forces (6) Glazing disintegrated from impact forces (7) Glazing removed prior to accident	
(03) Door/hatch (back door)		(8) No glazing (9) Unknown if damaged	
(04) Roof (05) Roof glass		(3) Onkilowii ii damaged	
(06) Side window (07) Rear window (backlight)		Glazing Damage from Occupant Contact	
(08) Roof and roof glass (09) Windshield and door (side)		23. WS <u>O</u> 24. LF <u>O</u> 25. RF <u>O</u> 26. LR <u>O</u> 27. RR <u>O</u>	
(10) Windshield and roof (11) Side and rear window (side window	v and backlight)	28. BL <u>O</u> 29. Roof <u>O</u> 30. Other <u>O</u>	
(12) Windshield and side window (13) Door and side window		(O) No occupant contact to glazing or no glazing	
(98) Other combination of above (specific	y):	(1) Glazing contacted by occupant but no glazing damage (2) Glazing in place and cracked by occupant contact (2) Glazing in place and baled by occupant contact	
(99) Unknown		(3) Glazing in place and holed by occupant contact (4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact (5) Glazing out-of-place by occupant contact and holed by	
Door, Tailgate or Hatch Opening		occupant contact (6) Glazing disintegrated by occupant contact (9) Unknown if contacted by occupant	
5. LF <u>/</u> 6. RF <u>/</u> 7. LR <u>Ø</u> 8. RR	9. TG/H <u></u>	If No Glazing Damage <i>And</i> No Occupant Contact or No	_
<ul><li>(0) No door/gate/hatch</li><li>(1) Door/gate/hatch remained closed an</li></ul>	d operational	Glazing, Then Code IV31 Through IV46 As Ø	
<ul><li>(2) Door/gate/hatch came open during c</li><li>(3) Door/gate/hatch jammed shut</li></ul>	collision	Type of Window/Windshield Glazing	
(8) Other (specify):		31. WS Ø32. LF Ø33. RF Ø34. LR Ø35. RR Ø	
(9) Unknown		36. BL  37. Roof  38. Other	
		(O) No glazing contact and no damage, or no glazing	
Damage/Failure Associated with Doo Opening in Collision. If IV05-IV09 ≠		(1) AS-1 — Laminated (2) AS-2 — Tempered	
10. LF <u>O</u> 11. RF <u>O</u> 12. LR <u>O</u> 13. I		(3) AS-3 — Tempered-tinted (4) AS-14 — Glass/Plastic	
(O) No door/gate/hatch or door not oper	ned	(8) Other (specify):	
Door, Tailgate or Hatch Came Open Duri	ing Collision	(9) Unknown	
<ul><li>(1) Door operational (no damage)</li><li>(2) Latch/striker failure due to damage</li></ul>		Window Precrash Glazing Status	
(3) Hinge failure due to damage	_	39. WS <u>O</u> 40. LF <u>O</u> 41. RF <u>O</u> 42. LR <u>O</u> 43. RR <u>O</u>	)
(4) Door structure failure due to damage (5) Door support (i.e., pillar, sill, roof sic		44. BL 45. Roof 46. Other	
etc.) failure due to damage (6) Latch/striker and hinge failure due to	o damage	(O) No glazing contact and no damage, or no glazing	
(8) Other failure (specify):		(1) Fixed (2) Closed	
(9) Unknown		(3) Partially opened (4) Fully opened (9) Unknown	



National	Accident San	npling System			EALINTRUSION	aye 2
Note	If no intrusion	s. leave varia			INTRUDING COMPONENT	
Note:	Location of	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction	Interior Components (01) Steering assembly (02) Instrument panel left	
	47	48	_ 49	50	(03) Instrument panel center (04) Instrument panel right (05) Toe pan (06) A (A1/A2)-pillar (07) B-pillar (08) C-pillar (09) D-pillar	
	51		C 57		(10) Door panel (side) (12) Roof (or convertible top) (13) Roof side rail (14) Windshield	
	59		61	62	(15) Windshield header (16) Window frame (17) Floor pan (includes sill) (18) Backlight header (19) Front seat back (20) Second seat back	
5th	63	. 54	65	66	(21) Third seat back (22) Fourth seat back (23) Fifth seat back (24) Seat cushion	
6th	67	_ 68	69	70	(25) Back door/panel (e.g., tailgate) (26) Other interior component (specify):  (27) Side panel - forward of the A (A2)-pillar	_
- 7th	71	72	73	74	(28) Side panel - rear of the A (A2)-pillar  Exterior Components	
8th	75	76	77	78	<ul><li>(30) Hood</li><li>(31) Outside surface of this vehicle (specify):</li><li>(32) Other exterior object in the environment</li></ul>	-
9th	79	_ 80	81	82	(specify): (33) Unknown exterior object (97) Catastrophic (98) Intrusion of unlisted component(s) (specify):	
10th	83	84	85	86	(99) Unknown	
Fro	TION OF INTE ont Seat (11) Left (12) Middle (13) Right cond Seat (21) Left (22) Middle (23) Right	Fourth (41 (42 (43 (97 (98	Seat Left Middle Right Catastropl Other enci	losed	MAGNITUDE OF INTRUSION  (1) ≥ 3 centimeters but < 8 centimeters  (2) ≥ 8 centimeters but < 15 centimeters  (3) ≥ 15 centimeters but < 30 centimeters  (4) ≥ 30 centimeters but < 46 centimeters  (5) ≥ 46 centimeters but < 61 centimeters  (6) ≥ 61 centimeters  (7) Catastrophic  (9) Unknown	
	ird Seat (31) Left (32) Middle (33) Right	(99	) Ünknown		DOMINANT CRUSH DIRECTION (1) Vertical (2) Longitudinal (3) Lateral (7) Catastrophic (9) Unknown	

(All Measurements Are in Continueters)								
COMPARISON VALUE	- DAMAGE VALUE = DEFORMATIO	N						
	-							
	<b>-</b> .							

STEERING COLUMN	93. Location of Steering Rim/Spoke
87. Steering Column Type (1) Fixed column	Deformation (00) No steering rim deformation
(2) Tilt column (3) Telescoping column	Quarter Sections (01) Section A
(4) Tilt and telescoping column	(02) Section B
(8) Other column type (specify):	(03) Section C (04) Section D
(9) Unknown	Half Sections
	(05) Upper half of rim/spoke (06) Lower half of rim/spoke (07) Left half of rim/spoke (08) Right half of rim/spoke
88. Blank <u>X X</u>	
(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.	(09) Complete steering wheel collapse (10) Undetermined location (99) Unknown
	INSTRUMENT PANEL
89. Blank  (This variable is left blank	94. Odometer Reading
so that numbering consistency	kilometers—Code to the nearest 1,000 kilometers
can be maintained with the 1988-93 CDS.	(000) No odometer
	(001) Less than 1,500 kilometers (500) 499,500 kilometers or more (999) Unknown
90. Blank (This variable is left blank	
so that numbering consistency can be maintained with the 1988-93 CDS.	
	The state of the s
	95. Instrument Panel Damage from Occupant Contact?
91. Blank  (This variable is left blank	(0) No
so that numbering consistency can be maintained with the 1988-93 CDS.	(1) Yes (9) Unknown
	96. Knee Bolsters Deformed from Occupant Contact?
92. Steering Rim/Spoke Deformation	(O) No
Code actual measured	(1) Yes (8) Not present
deformation to the nearest centimeter (00) No steering rim deformation	(9) Unknown
(01-14) Actual measured value in centimeters (15) 15 centimeters or more	97. Did Glove Compartment Door Open
(98) Observed deformation cannot be measured (99) Unknown	During Collision(s)?  (0) No
	(1) Yes (8) Not present
	(9) Unknown
·	

# VEHICLE INTERIOR SKETCHES Note area of ejection/entrapment

Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure.

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

(1) Certain

(2) Probable

(3) Possible

(9) Unknown

		POI	_		CUPANT CONTAC			0
	Interior Component	Occupant No. If		Body egion If				Confident Level of Contact
Contact	Contacted	Known	K	nown	Supporting Ph	ysical E	vidence	Point
Α								
В								
С						1		
D								
E				.,				
F								
G					12			
Н					100			
1								
J								
К				$\overline{}$				<del> </del>
L			1/					
			$\mathcal{X}$					
N								
•	ndshield	/ · · ·	(23)	Left B-pilla	ERIOR COMPONENTS  ar  pillar (specify):		Other occupants (s	
(02) Mir (03) Sur (04) Ste					window glass or frame window glass including	(47) (48)	Interior loose object Child safety seat (s	
(06) Ste	eering wheel hub/spo eering wheel (combin- codes 04 and 05)			frame, wi	ore of the following: ndow sill, A (A1/A2)-pillar, r roof side rail.	(49)	Other interior objec	t (specify):
(07) Ste	ering column, transn		(27)	•	side object (specify):	ROOF	Frank bandan	
	ector lever, other atta d on equipment (e.g.		(28)	Left side v	window sill	(50) (51)	Front header Rear header	
dec	ck, air conditioner)					(52)	Roof left side rail	
	it instrument panel a		RIGHT		intonian auntana	•	Roof right side rail Roof or convertible	ton
	nter instrument pane iht instrument panel :		(30)	_	interior surface, hardware or armrests	(04)	Moor of convertible	ЮР
	ove compartment doc		(31)	_	hardware or armrest	FLOOR		
(13) Kn	ee bolster				1/A2)-pillar	(56)	•	•
of	ndshield including on the following: front h (A1/A2)-pillar, instrur	eader,		Right B-pi Other righ	llar nt pillar (specify):	(67)	Floor or console me transmission lever, console	
mii	rror, or steering asset le only)	•		•	window glass or frame window glass including		Parking brake hand Foot controls include	
of	ndshield including on the following: front h	eader,		frame, wi	ore of the following: ndow sill, A (A1/A2)-pillar,	REAR	brake	
	(A1/A2)-pillar, instrun rror (passenger side d		(37)		r roof side rail. nt side object (specify):	(60)	Backlight (rear win	dow)
	iver side air bag com ver	partment	(38)	Right eids	window sill	(61) (62)	Backlight storage re Other rear object (s	
(17) Pa	ssenger side air bag			•		,,		
	mpartment cover indshield reinforced b	v exterior	INTERIO (40)	OR Seat, bac	k support			
ob	ject (specify): her front object (spec		(41)	Belt restr	aint webbing/buckle aint B-pillar		CONFIDENCE LEV	/FL OF
(19) (1	ner front object (\$pe	, <b>y</b> j.		attachme	nt point		CONTACT PO	
LEFT SIDE			(43)	Other res	traint system component	1	(1) Certain	

(specify):\_\_

(44) Head restraint system

compartment covers)

(45) Air bag (use codes "16" and "17"

for injuries sustained from air bag

### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

AUTOMATIC RESTRAINTS						
NOTES	NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.  AIR BAGS					
		Left	Right			
F	Availability/Function					
R	Deployment					
S	Failure					
Air Bag System Availability/Function (0) Not equipped/not available (1) Air bag  Non-functional (2) Air bag disconnected (specify):  (3) Air bag not reinstalled (9) Unknown		Air Bag System Deployment  (0) Not equipped/not available (1) Air bag deployed during accident (as a result of impact) (2) Air bag deployed inadvertently just prior to accident (3) Air bag deployed, accident sequence undetermined (4) Nondeployed (5) Inknown if deployed (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (9) Unknown	Did Air Bog System Fall? (0) Not equipped/not svailable (1) No (2) Yes (specify):  (9) Unknown			
		,Left	Right			
	Availability/Function					
F	Use					
R	Туре					
S	Proper Use					
	Failure Modes					
Availabi (0)   (1)   (2)   (3)   (4)   (4)   (4)   (4)   (4)   (5)   (6)   (6)   (7)	atic (Passive) Belt System  ility/Function  Not equipped/not available 2 point automatic belts 3 point automatic belts Automatic belts - type unknown  functional Automatic belts destroyed or rendered inoperative Unknown  atic (Passive) Belt System Use Not equipped/not available/destroyed or rendered inoperative Automatic belt in use Automatic belt in use (manually disconnected, motorized track inoperative) Automatic belt use unknown Unknown  atic (Passive) Belt System Type Not equipped/not available Non-motorized system Motorized system Unknown	roper Use of Automatic (Passive) Belt System  (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat  Automatic Belt Used Improperly (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  (8) Other improper use of automatic belt system (specify): (9) Unknown	Automatic (Passive) Belt Failure Modes During Accident  (0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify): (8) Other automatic belt failure (specify): (9) Uhknown			

### MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Ocupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
F	Availability	4	3	4
R S	Use	04	03	04
S T	Failure Modes		/	
S	Availability			
SECONO	Use			
N D	Failure Modes			
T H	Availability			
1	Use			
R D	Failure Modes			
Q	Availability			
Ĥ	Use			
E R	Failure Modes			and the second s

### Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):
- (9) Unknown

### Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used type unknown

- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

### Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

C	HILD SAFET	Y SEAT F	IELD ASS	ESSMENT		
When a child safety seat is pr the occupant's number using	esent enter the the codes liste	occupant's ned below. Co	umber in the emplete a col	first row and oumn for each	complete the co	olumn below at present.
Occupant Number						
Type of Child     Safety Seat	*.					1
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Uasge						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model		Speci	fy Below for	Each Child Sa	fety Seat	
1. Type of Child Safety Sea	it		3. Child S	afety Seat Ha	rness Usage	
<ul> <li>(0) No child safety seat</li> <li>(1) Infant seat</li> <li>(2) Toddler seat</li> <li>(3) Convertible seat</li> <li>(4) Booster seat</li> <li>(7) Other type child safet</li> <li>(8) Unknown child safet</li> <li>(9) Unknown if child safet</li> </ul>	y seat type	r):	5. Child S Note: C (00) N Not De (01) A	o child safety signed with H fter market ha	ther Usage Are Used for \ seat arness/Shield/I	<b>Tether</b>
2. Child Safety Seat Orient.  (00) No child safety sea  Designed for Rear Facing This Age/Weight  (01) Rear facing  (02) Forward facing  (08) Other orientation (9)  Unknown orientation	t of for specify):	-	(02) A (03) C h: (09) U ac Design (11) H (12) H	hild safety sea arness/shield/t nknown if har dded or used ed With Harne arness/shield/ arness/shield/	arness/shield/te at used, but no cether added ness/shield/tetl ass/Shield/Teth tether not used	after market her er
Designed for Forward Fa Age/Weight (11) Rear facing (12) Forward facing (18) Other orientation (s (19) Unknown orientation Unknown Design or Orientation (21) Rear facing (22) Forward facing (28) Other orientation (s	specify): on intation For Thi n Age/Weight	<b>-</b>	(21) H (22) H (29) U (99) U	arness/shield/ arness/shield/ Inknown if har Inknown if chi	ness/shield/tet	d ther used used
(29) Unknown orientation				·		
(99) Unknown if child s	afety seat used	I				<u> </u>

## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F	Head Restraint Type/Damage	0	0	0
I R	Seat Type	05	05	05
S	Seat Performance	/	1	1
1	Seat Orientation	1	/	
SE	Head Restraint Type/Damage			//
C	Seat Type			
0 N	Seat Performance			
Ď	Seat Orientation			
T	Head Restraint Type/Damage			
H	Seat Type			
Ŕ	Seat Performance			
D	Seat Orientation			
0	Head Restraint Type/Damage			
Ť	Seat Type			
E	Seat Performance			
R	Seat Orientation	·		

### Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1)
- Integral no damage Integral damaged during accident (2)
- (3)
- Adjustable no damage Adjustable damaged during accident (4)
- (5)
- Add-on no damage Add-on damaged during accident (6)
- Other Specify):
- (9) Unknown

### Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01)Bucket
- (02) Bucket with folding back
- (03) Bench
- Bench with separate back cushions (04)
- Bench with folding back(s) (05)
- (06)Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

### Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify:
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):
- (7) Combination of above (specify):
- (8) Other (specify):
- (9) Unknown

### Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):
- (9) Unknown

### DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

ECTION No [ ) Yes [ scribe indications of ejection and		volved in p	partial ejection	n(s):	10.44	
Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						
action 1) Complete ejection 1) Partial ejection 3) Ejection, Unknown degree 9) Unknown action Area 1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear	(9) Unkn  Ejection M  (1) Door, (2) Nonfi	edium /hatch/tail ixed roof s I glazing	pecify):	(8) C (9) U Medium to Impe (1) C (2) C (3) Ii	Inknown n Status (l	um (specify):
TRAPMENT No [ 1) Yes						
				· · · · · · · · · · · · · · · · · · ·		

PSU,81-038K

National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

HEAD RESTRAINT AND SEAT EVALUATION					
25. Head Restraint Type/Damage by Occupant at This Occupant Position (0) No head restraints (1) Integral—no damage (2) Integral—damaged during accident (3) Adjustable—no damage (4) Adjustable—damaged during accident (5) Add-on—no damage (6) Add-on—damaged during accident (8) Other (specify): (9) Unknown  26. Seat Type (this Occupant Position) (00) Occupant not seated or no seat (01) Bucket (02) Bucket with folding back (03) Bench (04) Bench with separate back cushions (05) Bench with folding back(s) (06) Split bench with separate back cushions (07) Split bench with folding back(s) (08) Pedestal (i.e., column supported) (09) Other seat type (specify): (10) Box mounted seat (i.e., van type) (99) Unknown	27. Seat Performance (this Occupant Position) (0) Occupant not seated or no seat (1) No seat performance failure(s) (2) Seat adjusters failed (3) Seat back folding locks or "seat back" failed (4) Seat track/anchors failed (5) Deformed by impact of occupant (6) Deformed by passenger compartment intrusion (specify):  (7) Combination of above (specify): (8) Other (specify): (9) Unknown				

PSU NUMBER
CASE NUMBER
VEHICLE NUMBER
OCCUPANT NUMBER

# OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

ENTIRE	FORM

[] PAGE NUMBER (S)

National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

Pene 4

HEAD RESTRAINT AND SEAT EVALUATION				
	at Th (0) 1 (1) 1 (2) 1 (3) 4 (5) 6 (8) (9) 1  Seat (00) (01)	Restraint Type/Damage by Occupant is Occupant Position No head restraints Integral—no damage Integral—damaged during accident Adjustable—no damage Adjustable—damaged during accident Add-on—no damage Add-on—damaged during accident Other (specify):  Unknown  Type (this Occupant Position) Occupant not seated or no seat Bucket	27. Seat Performance (this Occupant Position) (0) Occupant not seated or no seat (1) No seat performance failure(s) (2) Seat adjusters failed (3) Seat back folding locks or "seat back" failed (4) Seat track/anchors failed (5) Deformed by impact of occupant (6) Deformed by passenger compartment intrusic (specify):  (7) Combination of above (specify): (8) Other (specify): (9) Unknown	
	(03) (04) (05) (06) (07) (08) (09)	Bucket with folding back Bench Bench with separate back cushions Bench with folding back(s) Split bench with separate back cushions Split bench with folding back(s) Pedestal (i.e., column supported) Other seat type (specify):  Box mounted seat (i.e., van type) Unknown		

PSU NUMBER
CASE NUMBER
VEHICLE NUMBER
OCCUPANT NUMBER

# OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

H	ENTIRE FORM
ra	Dies Number (e)

Vatio	nal Accident Sampling System-Crashworthiness Dat	a System: Occupant Assessment Form	Page 4
	HEAD RESTRAINT AN	ID SEAT EVALUATION	
25.	Head Restraint Type/Damage by Occupant at This Occupant Position  (0) No head restraints (1) Integral—no damage (2) Integral—damaged during accident (3) Adjustable—no damage (4) Adjustable—damaged during accident (5) Add-on—no damage (6) Add-on—damaged during accident (8) Other (specify):	27. Seat Performance (this Occupant Position (0) Occupant not seated or no seat (1) No seat performance failure(s) (2) Seat adjusters failed (3) Seat back folding locks or "seat back" (4) Seat track/anchors failed (5) Deformed by impact of occupant (6) Deformed by passenger compartment (specify):	• failed
	(9) Unknown	(7) Combination of above (specify):	
		(8) Other (specify):	
26.	Seat Type (this Occupant Position)  (00) Occupant not seated or no seat  (01) Bucket  (02) Bucket with folding back  (03) Bench  (04) Bench with separate back cushions  (05) Bench with folding back(s)  (06) Split bench with separate back cushions  (07) Split bench with folding back(s)  (08) Pedestal (i.e., column supported)  (09) Other seat type (specify):	(9) Unknown  This occupant pact  Alding the the Bent  OF LED on intuiting the pact  SEA CARCING	ic ett) ore
	· ·		

PSU NUMBER
CASE NUMBER
VEHICLE NUMBER
OCCUPANT NUMBER

# OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

TT .	ENTIRE	FORM

[] PAGE NUMBER (S)

U.S. Department of Transportation

# CRASHPC PROGRAM SUMMARY

BEST AVAILABLE COPY

... Tanédia Saéatu

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM

lational Highway Traffic Safety  dministration	(All Bloods and the B	CRASHWORTHINESS DATA SYSTEM
Identifying Title  8  Primary Sampling Unit  Case NoStra	turn Accident Event Sequence No.	Date (Month, day, year) of Run
CRASHPC Vehicle Identification  Vehicle 1  Vehicle 2  Year	Fored Fr Make	Mus. 4 dR / Z -250 NASS Veh. No.
	GENERAL INFORMATION	
VEHICLE I  Size  Weight	3 Size Weight  566 kg   800 + / 5 Curb Occup  CDC PDOF (-180 to 3) Stiffness	VEHICLE 2 $63 + 180 = 21 33 \text{ kg}$ pant(s) Cargo $01 FDE W/$ $0 + 180$ $0 + 180$
	COENIE: INICODRA A TIONI	
	SCENE: INFORMATION	
Rest and Impact Positions ( No. VEHICLE 1	Go To Damage Information [ ] ] Y	VEHICLE 2
Rest XY Position YPSI	m Rest Position m	Xm Ym PSI°
Impact X Y PSI	m  mpact   Position   o	X m Y m PSI °
Slip Angle(-180 to +180)	° Slip Angle (-1	(80 to +180)°
	VEHICLE MOTION	
Sustained Contact [ ] No [ ] Ye VEHICLE 1		VEHICLE 2
Skidding (Rotation) [ ] Skidding Stop Before Rest [ ]	_	Stop Before Rest [ ] No [ ] Yes
Position	m	X
Curved Path [ ]  Point on Path X m Y	No [ ] Yes Curved Path Point on X	[ ] No [ ] Yes Path m
Rotation Direction [ ] None [ ] Rotation > 360° [ ] No [ ] Y	CW [ ] CCW Rotation Director   Rotation   >	

	System-Crashworthiness Date Cormations		"INFORMATION:
Coefficient of Friction		Trajectory Data [ ]	No [ ] Yes
Rolling Resistance Option		If No. Go To Damage I	nformation
Holling Hosiotalico Option		Vehicle 1 Steer Angles	
Vehicle 1 Rolling Resis	stance	1 , =	0 RF 0
	RF	LR	° RR °
	RR		
		Vehicle 2 Steer Angles	· :
Vehicle 2 Rolling Resis		LF	° RF °
LF	RF	LR	° RR °
LR	RR		
		Terrain Boundary [	] No [ ] Yes
		First Point	
		X m	Y m
		Second Point	
		X . m	Y m
		Secondary Coefficient	of Friction
		occordary coomercial	
	DAMAGEIN	IFORMATION:	
VEHIC	CLE 1	VE	HICLE 2
VEHIO	CLE 1 L <u>275</u> cm	VE Damage Length	HICLE 2 L/ <u>9</u> <u>0</u> cm
Damage Length	L <u>275</u> cm	Damage Length	L _/ <u>9</u> <u>0</u> cm
	$\begin{array}{cccc} L & \underline{\lambda} & \underline{75} & cm \\ C_1 & \underline{} & \underline{} & cm \end{array}$		L $/90$ cm
Damage Length	L <u>275</u> cm	Damage Length	L $/90$ cm
Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Damage Length	C,
Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Damage Length	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Damage Length Crush Depths	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Damage Length Crush Depths	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Damage Length  Crush Depths  Damage Offset	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Damage Length  Crush Depths  Damage Offset	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Damage Length  Crush Depths  Damage Offset	L $275$ cm  C <sub>1</sub> $275$ cm  C <sub>2</sub> $7$ cm  C <sub>3</sub> $9$ cm  C <sub>4</sub> $39$ cm  C <sub>6</sub> $17$ cm  C <sub>6</sub> $0$ cm  D $09$ cm	Damage Length  Crush Depths  Damage Offset	L $/90$ cm  C <sub>1</sub> $/4$ cm  C <sub>2</sub> $/4$ cm  C <sub>3</sub> $/4$ cm  C <sub>4</sub> $/4$ cm  C <sub>6</sub> $/3$ cm  C <sub>8</sub> $/2$ cm  D $++024$ cm
Damage Length  Crush Depths  Damage Offset  IF-THIS COMMON IMPAC  Model Year:	L $\frac{275}{\text{cm}}$ cm  C <sub>1</sub> $\frac{275}{\text{cm}}$ cm  C <sub>2</sub> $\frac{7}{\text{cm}}$ cm  C <sub>3</sub> $\frac{3}{9}$ cm  C <sub>4</sub> $\frac{3}{17}$ cm  C <sub>6</sub> $\frac{17}{0}$ cm  D $\frac{4}{00}$ 9 cm	Damage Length  Crush Depths  Damage Offset  E.NOT IN TRANSPORT, FILL.  The Weight, CDC, Scene	L $/90$ cm  C <sub>1</sub> $/90$ cm  C <sub>2</sub> $/0$ cm  C <sub>3</sub> $/0$ cm  C <sub>4</sub> $/0$ cm  C <sub>6</sub> $/0$ cm  C <sub>6</sub> $/0$ cm  D $++024$ cm  IN THE INFORMATION BELOW:
Damage Length  Crush Depths  Damage Offset  IF-THIS COMMON IMPAC  Model Year: Make:	L $\frac{275}{\text{cm}}$ cm  C <sub>1</sub> $\frac{275}{\text{cm}}$ cm  C <sub>2</sub> $\frac{7}{\text{cm}}$ cm  C <sub>3</sub> $\frac{3}{9}$ cm  C <sub>4</sub> $\frac{17}{0}$ cm  C <sub>6</sub> $\frac{17}{0}$ cm  D $\frac{17}{0}$ cm  T WAS WITH A MOTOR VEHICL	Damage Length  Crush Depths  Damage Offset	L $/90$ cm  C <sub>1</sub> $/90$ cm  C <sub>2</sub> $/0$ cm  C <sub>3</sub> $/0$ cm  C <sub>4</sub> $/0$ cm  C <sub>6</sub> $/0$ cm  C <sub>6</sub> $/0$ cm  D $++024$ cm  IN THE INFORMATION BELOW:
Damage Length  Crush Depths  Damage Offset  IF-THIS COMMON IMPAC  Model Year: Make: Model:	L $\frac{275}{\text{cm}}$ cm  C <sub>1</sub> $\frac{275}{\text{cm}}$ cm  C <sub>2</sub> $\frac{7}{\text{cm}}$ cm  C <sub>3</sub> $\frac{39}{\text{cm}}$ cm  C <sub>4</sub> $\frac{17}{\text{cm}}$ cm  C <sub>6</sub> $\frac{17}{\text{cm}}$ cm  D $\frac{1}{\text{cm}}$ cm	Damage Length  Crush Depths  Damage Offset  E.NOT IN TRANSPORT, FILL.  The Weight, CDC, Scene	L $/90$ cm  C <sub>1</sub> $/90$ cm  C <sub>2</sub> $/0$ cm  C <sub>3</sub> $/0$ cm  C <sub>4</sub> $/0$ cm  C <sub>6</sub> $/0$ cm  C <sub>6</sub> $/0$ cm  D $++024$ cm  IN THE INFORMATION BELOW:
Damage Length  Crush Depths  Damage Offset  IF-THIS COMMON IMPAC  Model Year: Make: Model:	L $\frac{275}{\text{cm}}$ cm  C <sub>1</sub> $\frac{275}{\text{cm}}$ cm  C <sub>2</sub> $\frac{7}{\text{cm}}$ cm  C <sub>3</sub> $\frac{3}{9}$ cm  C <sub>4</sub> $\frac{17}{0}$ cm  C <sub>6</sub> $\frac{17}{0}$ cm  D $\frac{17}{0}$ cm  T WAS WITH A MOTOR VEHICL	Damage Length  Crush Depths  Damage Offset  E.NOT IN TRANSPORT, FILL.  The Weight, CDC, Scene	L $/90$ cm  C <sub>1</sub> $/90$ cm  C <sub>2</sub> $/0$ cm  C <sub>3</sub> $/0$ cm  C <sub>4</sub> $/0$ cm  C <sub>6</sub> $/0$ cm  C <sub>6</sub> $/0$ cm  D $++024$ cm  IN THE INFORMATION BELOW:
Damage Length  Crush Depths  Damage Offset  FIFTHIS COMMON IMPAC  Model Year: Make: Model: VIN:	L $\frac{275}{\text{cm}}$ cm  C <sub>1</sub> $\frac{275}{\text{cm}}$ cm  C <sub>2</sub> $\frac{7}{\text{cm}}$ cm  C <sub>3</sub> $\frac{39}{\text{cm}}$ cm  C <sub>4</sub> $\frac{17}{\text{cm}}$ cm  C <sub>6</sub> $\frac{17}{\text{cm}}$ cm  D $\frac{1}{\text{cm}}$ cm	Damage Length  Crush Depths  Damage Offset  ENOTIN TRANSPORT, FILL.  The Weight, CDC, Scene for this vehicle should be	L $/90$ cm $C_1$ $/90$ cm $C_2$ $/0$ cm $C_3$ $/0$ cm $C_4$ $/0$ cm $C_6$ $/0$ $/0$ cm $C_6$ $/0$ $/0$ cm $C_6$ $/0$ $/0$ cm $C_7$ $/0$ cm $C_8$ $/0$ $/0$ cm $C_8$ $/0$ $/0$ cm $C_8$ $/0$ cm $C_9$ $/0$ c

| INPUT CALCULATE TRAJECTORY OUTPUT GRAPHICS EXIT

TITLE

### CRASH3 RECONSTRUCTION

### GENERAL INFORMATION

VEHICL -	E #1
SIZE	3
WEIGHT	1566.
CDC	10LYAW3
PDOF	-60.00
STIFFNESS	3
CANCEL	ACCEPT

VEHICL	E #2
SIZE	6
WEIGHT	2133.
CDC	01FDEW1
PDOF	30.00
STIFFNESS	8
CANCEL	ACCEPT

# METRIC INPUT

	INPUT	-	CALCULATE	TRAJECTORY	OUTPUT	GRAPHICS	EXIT	
11								1

# DAMAGE INFORMATION

VEHICLE #	1	
DAMAGE LENGTH 275.0		
CRUSH DEPTHS		
C1	.000	
02	7.000	
03	39.00	
□4 -	34.00	
C5	17.00	
06	.000	
DAMAGE OFFSET	9.000	
CANCEL	ACCEPT	

VEHICLE #2	
DAMAGE LENGTH	190.0
CRUSH DEPTHS	
C:1	4.000
C2	4.000
C3	4.000
C4	4.000
C5	3.000
C6	12.00
DAMAGE OFFSET	24.00
CANCEL A	ACCEPT

INPUT CALCULATE TRAJECTORY OUTPUT GRAPHICS EXIT

# SUMMARY OF CRASHPC RESULTS USING DAMAGE

CRASH3\_ RECONSTRUCTION

SPEED CHANGE (DAMAGE)

VEHICLE #1

TOTAL 29 KPH ( 18 MPH)
LONGITUDINAL -14 KPH-( -9 MPH)
LATITUDINAL 25 KPH ( 16 MPH)
PDOF ANGLE -60 DEGREES

ENERGY DISSIPATED = 65373 JOULES ( 48210 FT-LB)

VEHICLE #2

TOTAL 21 KPH ( 13 MPH)
LONGITUDINAL -18 KPH ( -11 MPH)
LATITUDINAL -11 KPH ( -7 MPH)
PDOF ANGLE 30 DEGREES

ENERGY DISSIPATED = 36965 JOULES ( 27261 FT-LB)

PRESS ANY KEY TO CONTINUE

INPUT CALCULATE TRAJECTORY OUTPUT GRAPHICS EXIT

DAMAGE DATA

VEHICLE #1 VEHICLE #2

SIZE CATEGORY	3	6
STIFFNESS CATEGORY	3	8
VEHICLE WEIGHT	1566 KGS ( 3452 LBS)	2133 KGS ( 4702 LBS)
CDC	10LYAW3	01FDEW1
PDOF ANGLE	-60 DEGREES	30 DEGREES
CRUSH LENGTH	275 CM. ( 108 IN.)	190 CM. ( 75 IN.)
C1	0 CM. ( 0 IN.)	4 CM. ( 2 IN.)
C2	7 CM. ( 3 IN.)	4 CM. ( 2 IN.)
C3	39 CM. ( 15 IN.)	4 CM. ( 2 IN.)
04	34 CM. ( 13 IN.)	4 CM. ( 2 IN.)
C5	17 CM. ( 7 IN.)	3 CM. ( 1 IN.)
06	0 CM. ( 0 IN.)	12 CM. ( 5 IN.)
D	9 CM. ( 4 IN.)	24 CM. ( 9 IN.)
D,	16 CM. ( 6 IN.)	36 CM. ( 14 IN.)

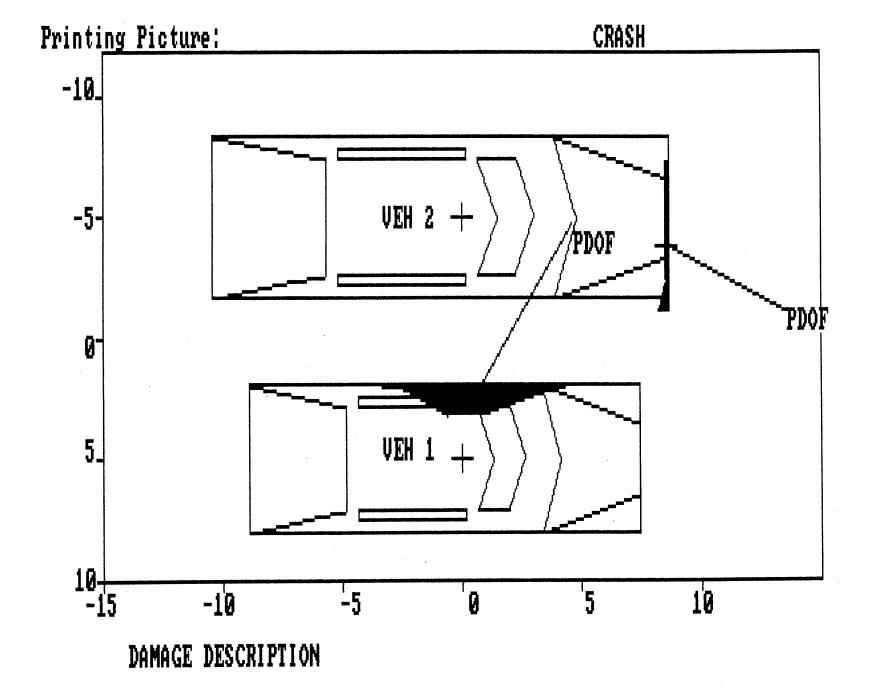
(\* INDICATES DEFAULT VALUE)
PRESS ANY KEY TO CONTINUE

INPUT	CALCULATE	TRAJECTORY	OUTPUT	GRAPHICS:	EXIT

# DIMENSIONS AND INERTIAL PROPERTIES

	VEHICLE #1	VEHIULE #2
CG TO FRONT AXLE	130 CM. ( 51 IN.)	153 CM. ( 60 IN.)
CG TO REAR AXLE	141 CM. ( 56 IN.)	165 CM. ( 65 IN.)
TRACK	150 CM. ( 59 IN.)	162 CM. ( 64 IN.)
CG TO FRONT OF VEH	228 CM. ( 90 IN.)	265 CM. ( 104 IN.)
CG TO REAR OF VEH	-270 CM. (-106 IN.)	-318 CM. (-125 IN.)
CG TO SIDE OF VEH	92 CM. ( 36 IN.)	101 CM. ( 40 IN.)
MOMENT OF INERTIA	13535 KGS.( 29838 LBS)	23454 KGS ( 51707 LBS)
VEHICLE MASS	4 KGS ( 9 LBS)	6 KGS ( 12 LBS)

PRESS ANY KEY TO CONTINUE



```
INTRA ERRORS
            OHH1281 2 ****** THIS VEHICLE IS INICATED AS HAVING AN AIRBAG.
                     ***** CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE
****
             HH1282
                        AIR BAG AVAILABILITY/FUNCTION DA21 equals 1-3.
*****
             HH1283
                     THIS CASE SHOWS AN AIR BAG DIDN'T DEPLOY.
HH1991 2 *****
          ***** CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE ******
HH1992
                      AND NHTSA HEADQUARTERS AT
HH1993
          AIR BAG DEPLOYMENT DA22 equals 4.
HH1994
 INTRA ERRORS
            OHHOO71 2 Given OCCUPANT HEIGHT DAO7 and OCCUPANT SEX DAO6, DCCUP
                        WEIGHT OAO8 is questionable. See Table A2.
ANT
             HH0072
INTER ERRORS
            OGCOO11 2 If MODEL YEAR GVO4 does not equal 99, and ODOMETER READ
                       does not equal 999, then IV94 should be less than or eq
             GC0012
ING IV94
                        65*(CURRENT YEAR - GV04 + 2). GV=01
ual to
            GC0013
1
```

1993 ACCIDENT FORM

# IDENTIFICATION

PSU81 CASE 038K

3. Number of General Vehicle Forms Submitted

4. Date of Accident (Month, Day, Year)

5. Time of Accident (military time)

02 1915

SPECIAL STUDIES - INDICATORS 6. SS14 0 7. SS15 0 8. SS16 0 9. SS17 0 10. SS18 0

NUMBER OF EVENTS

11. Number of Recorded Events in This Accident 01

PSU81 CASE 038K

		AC	CIDENT	r eve	ENTS				
Accident Sequence Number	Vehicle Number	Class of Vehicle	Gener Area Damag	of	Veh. or Obj.		Class Vehic		General Area of Damage
012. 01	013. 01	014. 03	015.	L	016.	02	017.	15	018. F
011 INTRA ER	RORS								
	01****	**** NO ERF	RORS **	* <b>* *</b> *	***** 001				
PSU81 CASE 038K VEHICLE 0		1993 GB	ENERAL	VEH	ICLE FOR	:M			
VEHICLE IDE 4. Model Y 6. Model 8. VIN	ear 91 017	:P50U9MG		5. 7.	Make Body Ty	/pe	12 04		
OFFICIAL RE 9. Police 11. Police			1 O	10. 12.	Police Alcohol	Reported Test Re	l Trave sult	el Spee for Dri	d 999 ver 96
ACCIDENT RE 13. Speed L 15. Acciden	_imit		064 82	14.	Attempt	ed Avoid	i. Man	euver	01
OCCUPANT RE 16. Driver 18. No. Occ			1 02	17	. No. Oc	cupants	This	Vehicle	02
VEHICLE WEI 19. Vehicle	IGHT ITEMS • Curb Weigh	nt	138	20	. Vehicl	le Cargo	Weigh	t	000
	FION DATA Frailing Uni ol. Cond. o		0		. Trajed . Rollov	ctory Dat ver	ta Doc	umentec	I <u>0</u> 0
OVERRIDE/UN 25. F O	NDERRIDE (t	nis vehicle)		26	. RO				

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V 27. Heading Angle This Vehicle 270 28. Heading Angle Other Vehicle 000

COMPUTER	GENERATED	DELTA V
----------	-----------	---------

30. Total Delta V	029
31. Longitudinal Component of Delta V	-014
32. Lateral Component of Delta V	+025
33. Energy Absorption	0654
34. Confidence in Reconstruction Program Results	1
35. Type of Vehicle Inspection	1
36. Is this an AOPS vehicle?	1

37.	Police Reported	Drug	Presence	σ
38.	Police Reported	Drug	Evaluation Classification	0
39.	Other Drug Spec	imen '	Test Type for Driver	O

# DRUG EVALUATION CLASSIFICATION / Other Test Results for Driver

	DEC Obs	Specimen		
	Rerception	Test Results	Test Results	
Narcotic Drug	40.	0	41. 0	
Depressant Drug	42.	0	43. 0	
Stimulant Drug	44.	0	45. 0	
Hallucinogen Drug	46.	0	47. 0	
Cannabinoid Drug	48.	0	49. 0	
Phencyclidine (PCP)	50.	0	5i. O	
Inhalant Drug	52.	0	53. 0	
Other Drug	54.	0	<b>55.</b> 0	

OTHER DATA 56. Driver's Zip Code 58. Vehicle Special Use	98146 0	57.	Driver's Race/Ethnic Origin	1
ROLLOVER DATA				
59. Rollover Initiation Type	0	60.	Location of Rollover Initiation	0
61. Rollover Initiation	00	62.	Location on Vehicle Where Initial	0
Object Contacted			Principal Tripping Force Applied	
63. Direction of Initial Roll	0			
PRECRASH DATA				
64. Pre-Event Movement	10	65.	Initial Critical (Precrash) Event	15
(Prior to Recognition of Critical Event)				
66. Precrash Stability After	0	67.	Precrash Directional Consequences	0
011			·	

PSU81 CASE 038K VEHICLE 01

### COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"	Н	TG	HE	ST	DEL	TA	"'\"
-------------------	---	----	----	----	-----	----	------

	ident Jence Jer		ect tact <b>e</b> d		ection Force			Long or :		Ver O Lat		Type Damae Dist	ge	Defo Exte	
4.	01	5.	02	6.	10	7.	٠٢	8.	Υ	9.	A	10.	W	11.	03
SECO	א מאכ	IGHE	ST DELT	A "V"	11										
12.		13.		14.		15.		16.		17.		18.		19.	

# CRUSH PROFILE IN CENTIMETERS

# HIGHEST DELTA "V"

20.	L 275	21.	01 000		039 039			000 000	22.	+/-D +009
SECO	OND HIGHE	ST DE	LTA "	<i>)</i> ''						
23.	L	24.	C1	02	СЗ	C4	C5	C6	25.	+/-D

- 26. CDCs Documented but not coded O 27. Researchers Assess. Veh. Disp. 1 28. Original Wheelbase 269
- 29. Is this a Multi-staged Manufactured Vehicle of and/or a Certified Altered Vehicle?

  30. Fire Occurrence of 31. Origin of Fire of 32. Type of Fuel Tank of 1 INTRA ERRORS

01\*\*\*\*\*\* NO ERRORS \*\*\*\*\*\*\*

PSU81 CASE 038K VEHICLE 01

### INTEGRITY

# 4. Passenger Compartment 06 , ressenger comparement vo

Door, Tailgate or Hatch opening

5. LF 3 6. RF 1 7. LR 3 8. RR 1 9. TG/H 0

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

GLAZING

Glazing Damage from Impact Forces

15. WS 2 20. BL 0 16. LF 6 17. RF 0 21. Roof 8 22. Other 0

18. LR 6 19. RR 0

Glazing Damage from Occupant Contact

23. WS 9 28. BL 0 24. LF 0

25. RF 0 29. Roof 0 30. Other 0 26. LR 0 27. RR 0

GLAZING (Cont.)

Type of Window/Windshield Glazing

31. WS 1 36. BL 0 32. LF 2

37. Roof O

33. RF 0 38. Other O

34. LR 2 35. RR 0

Window Precrash Glazing Status

39. WS 1

40. LF 2

41. RF 0 42. LR 2 43. RR 0

44. BL 0

**45.** Roof 0

46. Other O

#### OCCUPANT AREA INTRUSION

Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
47. 11 51. 21 55. 11 59. 11 63. 67. 71. 75. 79.	48. 07 52. 10 56. 10 60. 13 64. 68. 72. 76. 80. 84.	49. 4 53. 3 57. 3 61. 2 65. 69. 73. 77. 81. 85.	50. 3 54. 3 58. 3 62. 3 66. 70. 74. 78. 82. 86.

# STEERING COLUMN

8/.	Steering Column	lype	2		
88.	Blank			89. Blank	
90.	Blank			91. Blank	

92. Steering Rim/Spoke Deform 00 93. Location of Rim/Spoke Deform 00

#### INSTRUMENT PANEL

94. Odometer Reading 319,000 95. Instrument Panel Damage 0 96. Knee Bolsters Deformed 0 97. Glove Door Open 0

INTRA ERRORS

01\*\*\*\*\*\* NO ERRORS \*\*\*\*\*\*

001

PSU81

1993 OCCUPANT ASSESSMENT FORM

CASE 038K

VEHICLE 01 OCCUPANT 01

#### OCCUPANT'S CHARACTERISTICS

5. Age 84 6. Sex 1 7. Height 183 8. Weight 095 9. Role 1

#### OCCUPANT'S SEATING

10. Seat Position 11 11. Posture 0

# **EJECTION/ENTRAPMENT**

12.	Ejection	O	13.	Ejection Area	0	14. Ejection Medium O	
15.	Medium Status	0	16.	Entrapment	O		

# RESTRAINT SYSTEM EVALUATION

17.	Belt System Availability	4	18. Belt System Use	04
19.	Proper Use of Belt	1	20. Belt Failure Modes During Impact	1
21.	Air Bag Availability	1	22. Air Bag Deployment	4
23.	Are There Indications of	1	24. Police Reported Restraint Use	4
	Air Bag System Failure?		•	

# HEAD RESTRAINT AND SEAT EVALUATION

	· · · · · · · · · · · · · · · · · · ·		
25.	Head Restraint Type/Damage	3	
	by Occupant at this Position	•	
26.	Seat Type	. 06	
27.	Seat Performance	. 6	

# CHILD SAFETY SEAT

28.	Child/Safety Seat Make/Model	000
29.	Type of Child Safety Seat	O
30.	Orientation	00
31.	Harness	OO
32.	Shield	00
33.	Tether	00

# INJURY CONSEQUENCES

34.	Severity (Police Rating)	3
35.	Treatment - Mortality	2
36.	Type of Med. Facility (Initial)	1
37.	Hospital Stay	00
38.	Working Days Lost	62

# CAUSE OF DEATH (Completed by Zone Center)

- 39. Time to Death 40. Cause #1
- 41. Cause #2
- 42. Cause #3
- 43. Number of Recorded Injuries

#### AUTOMATIC BELT SYSTEM

44.	Automatic (Passive) Belt System Availability/Function	0
45.	Automatic (Passive) Belt System Use	0
46.	Automatic (Passive) Belt System Type	0
47.	Proper Use of Automatic (Passive) Belt System	0
48.	Automatic (Passive) Belt System Failure Mode	0
49.	Seat Orientation (this Occupant Position)	1

# TRAUMA DATA (Completed by Zone Center)

50. Glasgow Coma Scale (GCS) Score

51. Was the Occupant Given Blood?

52. Arterial Blood Gases (ABG) - HCO3

011

### INTRA ERRORS

	OHH1281 2	****** THIS VEHICLE IS INICATED AS HAVING AN AIRBAG
<b>***</b> **	HH1282	***** CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZO
NE *****	HH1283	AIR BAG AVAILABILITY/FUNCTION 0A21 equals 1-3.
		CASE SHOWS AN AIR BAG DIDN'T DEPLOY. ******

HH1991 2 \*\*\*\*\*\* THIS CASE SHOWS AN AIR BAG DIDN'T DEPLOY. \*\*\*\*\*\*

HH1992 \*\*\*\*\*\* CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE \*\*\*\*\*\*

HH1993 \*\*\*\*\*\* AND NHTSA HEADQUARTERS AT \*\*\*\*\*\*

HH1994 AIR BAG DEPLOYMENT OA22 equals 4.

# PSU81 1993 OCCUPANT ASSESSMENT FORM CASE 038K

VEHICLE 01 OCCUPANT 02

#### OCCUPANT'S CHARACTERISTICS

5. Age 72 6. Sex 2 7. Height 170 8. Weight 091 9. Role 2

### OCCUPANT'S SEATING

10. Seat Position 13 11. Posture 0

# EJECTION/ENTRAPMENT

12. Ejection 0 13. Ejection Area 0 14. Ejection Medium 0 15. Medium Status 0 16. Entrapment 0

### RESTRAINT SYSTEM EVALUATION

17.	Belt System Availability	4	18. Belt System Use 04
19.	Proper Use of Belt	1	20. Belt Failure Modes During Impact 1
21.	Air Bag Availability	0	22. Air Bag Deployment 0
23.	Are There Indications of	O	24. Police Reported Restraint Use 4
	Air Bag System Failure?		

### HEAD RESTRAINT AND SEAT EVALUATION

20.	Head Kestraint	ype/Damage	ತ
	by Occupant at	this Position	
26.	Seat Type		06
27.	Seat Performanc	е	1

# CHILD SAFETY SEAT

28.	Child/Safety Seat Make/Model	000
29.	Type of Child Safety Seat	0
30.	Orientation	00
31.	Harness	00
32.	Shield	00
33.	Tether	00

# INJURY CONSEQUENCES

34.	Severity (Police Rating)	1
35.	Treatment - Mortality	4
36.	Type of Med. Facility (Initial)	1
37.	Hospital Stay	00
38.	Working Days Lost	97

# CAUSE OF DEATH (Completed by Zone Center)

~	-	-	•			**	
3	7	1	1	me	to	Dea	th

- 40. Cause #1
- 41. Cause #2
- 42. Cause #3
- 43. Number of Recorded Injuries

# AUTOMATIC BELT SYSTEM

44.	Automatic (Passive) Belt System Availability/Function	0
45.	Automatic (Passive) Belt System Use	0
46.	Automatic (Passive) Belt System Type	0
47.	Proper Use of Automatic (Passive) Belt System	0
48.	Automatic (Passive) Belt System Failure Mode	0
49.	Seat Orientation (this Occupant Position)	1

# TRAUMA DATA (Completed by Zone Center)

- 50. Glasgow Coma Scale (GCS) Score
- 51. Was the Occupant Given Blood?
- 52. Arterial Blood Gases (ABG) HCO3

011

INTRA ERRORS

01\*\*\*\*\*\*\*\* NO ERRORS \*\*\*\*\*\*\*

PSU81 CASE 038K VEHICLE 02

VEHICLE IDENTIFICATION 4. Model Year 83 6. Model 481 8. VIN 1FTHF25L3DF		5. 7.	Make Body Type	12 31	
OFFICIAL RECORDS  9. Police Reported Disposition 11. Police Rep. Alcohol Presence	1 0		Police Reported Alcohol Test Res		
ACCIDENT RELATED 13. Speed Limit 15. Accident Type	064 83		Attempted Avoid.	Maneuver	03
	•	, 			
OCCUPANT RELATED 16. Driver Presence in Vehicle 18. No. Occupant Forms Submitted	1 03	17	. No. Occupants T	his Vehicle	03
VEHICLE WEIGHT ITEMS 19. Vehicle Curb Weight	180	20	. Vehicle Cargo W	eight	018
RECONSTRUCTION DATA 21. Towed Trailing Unit 23. Post Col. Cond. of Tree/Pole	0		. Trajectory Data . Rollover	Documented	0
OVERRIDE/UNDERRIDE (this vehicle) 25. F 0		26	. R 0		
HEADING ANGLE AT IMPACT FOR HIGHE 27. Heading Angle This Vehicle			. Heading Angle O	ther Vehicle	270
HEADING ANGLE AT IMPACT FOR HIGHE 29. Basis for Total Delta V	ST DEL	TA V	(Cont.)	1	
COMPUTER GENERATED DELTA V 30. Total Delta V 31. Longitudinal Component of Del 32. Lateral Component of Delta V 33. Energy Absorption 34. Confidence in Reconstruction 35. Type of Vehicle Inspection		m Re	sults	021 -018 -011 0370 1	
36. Is this an AOPS vehicle?				0	

37.	Police	Reported	Drug	Presence	0
38.	Police	Reported	Drug	Evaluation Classification	0
39.	Other I	Orua Speci	imen -	Test Type for Driver	Ö

# DRUG EVALUATION CLASSIFICATION / Other Test Results for Driver

·	DEC Obs	Specimen		
	Perception	Test	Results	Test Results
Narcotic Drug	40.	0		41. 0
Depressant Drug	42.	0		43. 0
Stimulant Drug	44.	0		45. 0
Hallucinogen Drug	46.	0		47. 0
Cannabinoid Drug	48.	·o		49. 0
Phencyclidine (PCP)	50.	0		51. 0
Inhalant Drug	52.	0		53. 0
Other Drug	54.	0		55. 0

56. Driver's Zip Code 58. Vehicle Special Use	0	57. Driver's Race/Ethnic Origin 1	
ROLLOVER DATA 59. Rollover Initiation Type 61. Rollover Initiation Object Contacted 63. Direction of Initial Roll	0 00	60. Location of Rollover Initiation 0 62. Location on Vehicle Where Initial 0 Principal Tripping Force Applied	
PRECRASH DATA 64. Pre-Event Movement	01	65. Initial Critical (Precrash) Event 7	2
(Prior to Recognition of Critical Event) 66. Precrash Stability After 011	2 .	67. Precrash Directional Consequences 1	
INTRA ERRORS			

01\*\*\*\*\*\*\* NO ERRORS \*\*\*\*\*\*\*

PSUB1 CASE 038K VEHICLE 02

# COLLISION DEFORMATION CLASSIFICATION

L	4	Т	GH	4E.S	T	DEI	TΑ	"V"
г	₹.		136	15		171	_ , _	~

	dent lence er		ect tacted		ection Force		orm. ation	Long	cific gitud. lat. ation	Ver O Lat		Type Dama Dist	ge	Defo Exte	
4.	01	5.	01	6.	01	7.	.F	8.	D	9.	E	10.	W	11.	01
SECO	SECOND HIGHEST DELTA "V"														
12.		13.		14.		15.		16.		17.		18.		19.	

# CRUSH PROFILE IN CENTIMETERS

# HIGHEST DELTA "V"

20.	L 190	21.			03 004			C <b>6</b> 012	22.	+/-D +024
SECO	OND HIGHE	ST DE	LTA "V	<i>j</i> ''						
23.	L	24.	Ci	02	C3	04	C <b>5</b>	C6	25.	+/-D

26. CDCs Documented but not coded 0 27. Researchers Assess. Veh. Disp. 1 28. Original Wheelbase 338

29.	Is this a Multi-staged Manufactured Vehicle	0
	and/or a Certified Altered Vehicle?	
30.	Fire Occurrence	0
31.	Origin of Fire	0
	Type of Fuel Tank	1
011		
	INTOA COOCOC	

INTRA ERRORS

01\*\*\*\*\*\*\*\*\* NO ERRORS \*\*\*\*\*\*\*\*

### INTEGRITY

4. Passenger Compartment 00

Door, Tailgate or Hatch opening

5. LF 1 6. RF 1 7. LR 0 8. RR 0 9. TG/H 0

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision

GLAZING

Glazing Damage from Impact Forces

15. WS 0 20. BL 0

16. LF 0 17. RF 0 21. Roof 8 22. Other 0

18. LR 8 19. RR 8

Glazing Damage from Occupant Contact

23. WS 0 28. BL 0 24. LF 0 25. RF 0 29. Roof 0 30. Other 0

26. LR 0 27. RR 0

GLAZING (Cont.)

Type of Window/Windshield Glazing

Window Precrash Glazing Status

39. WS 0

44. BL 0

#### OCCUPANT AREA INTRUSION

Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
49	aq	50.
52.	53.	54.
56.	57 <b>.</b>	58.
60.	51.	62.
64.	65.	66.
68.	69 <b>.</b>	70.
72.	73.	74.
76.	77.	78.
80.	81.	82.
84.	85.	86.
	Component  48. 52. 56. 60. 64. 68. 72. 76. 80.	Component of Intrusion  48.

### STEERING COLUMN

87. Steering Column Type 1

88. Blank 99. Blank 90. Blank 91. Blank

92. Steering Rim/Spoke Deform 00 93. Location of Rim/Spoke Deform 00

### INSTRUMENT PANEL

94. Odometer Reading 180,000 95. Instrument Panel Damage 0 96. Knee Bolsters Deformed 8 97. Glove Door Open 0

011

INTRA ERRORS

01\*\*\*\*\*\*\* NO ERRORS \*\*\*\*\*\*\*

001

PSU81

1993 OCCUPANT ASSESSMENT FORM

CASE 038K

VEHICLE 02 OCCUPANT 01

# OCCUPANT'S CHARACTERISTICS

5. Age 44 6. Sex 1 7. Height 173 8. Weight 075 9. Role 1

# OCCUPANT'S SEATING

10. Seat Position 11 11. Posture 0

#### EJECTION/ENTRAPMENT

12. Ejection O 13. Ejection Area O 14. Ejection Medium O

15. Medium Status 0 16. Entrapment 0

### RESTRAINT SYSTEM EVALUATION

17.	Belt System Availability	4	18. Belt System Use 04
19.	Proper Use of Belt	1	20. Belt Failure Modes During Impact 1
21.	Air Bag Availability	O	22. Air Bag Deployment O
23.	Are There Indications of	O	24. Police Reported Restraint Use
	Air Bag System Failure?		

# HEAD RESTRAINT AND SEAT EVALUATION

25.	Head Restraint	Type/Damage		O
	by Occupant at	this Position	•	
26.	Seat Type			05
27.	Seat Performan	ce ,		1

### CHILD SAFETY SEAT

28.	Child/Safety Seat Make/Model	000
29.	Type of Child Safety Seat	0
30.	Orientation >	QQ
31.	Harness	00
32.	Shield '	00
33.	Tether	00

# INJURY CONSEQUENCES

34.	Severity (Police Rating)	0
35.	Treatment - Mortality	O
36.	Type of Med. Facility (Initial)	0
37.	Hospital Stay	ÓO
38.	Working Days Lost	00

# CAUSE OF DEATH (Completed by Zone Center)

39. Time to Death

40. Cause #1

41. Cause #2

42. Cause #3

43. Number of Recorded Injuries

# AUTOMATIC BELT SYSTEM

44.	Automatic	(Passive)	Belt	System	Availability/Function	0
45.	Automatic	(Passive)	Belt	System	Use	0
46.	Automatic	(Passive)	Belt	System	Type	O
47.	Proper Use	of Automa	atic (	(Passive	e) Belt System	0
48.	Automatic	(Passive)	Belt	System	Failure Mode	0
49.	Seat Orien	tation (th	nis Od	cupant	Position)	1

# TRAUMA DATA (Completed by Zone Center)

50.	Glasgow	Coma	Scale	(GCS)	Score
-----	---------	------	-------	-------	-------

- 51. Was the Occupant Given Blood?
- 52. Arterial Blood Gases (ABG) HCO3

011

INTRA ERRORS

01\*\*\*\*\*\*\* NO ERRORS \*\*\*\*\*\*

### OCCUPANT'S CHARACTERISTICS

5. Age 09 6. Sex 1 7. Height 137 8. Weight 035 9. Role 2

### OCCUPANT'S SEATING

10. Seat Position 13 11. Posture 0

#### EJECTION/ENTRAPMENT

12. Ejection 0 13. Ejection Area 0 14. Ejection Medium 0 15. Medium Status 0 16. Entrapment 0

#### RESTRAINT SYSTEM EVALUATION

17.	Belt System Availability	4	18. Belt System Use 04	4
19.	Proper Use of Belt	1	20. Belt Failure Modes During Impact	1
21.	Air Bag Availabil'ity	0	22. Air Bag Deployment (	_)
23.	Are There Indications of	O	24. Police Reported Restraint Use	1
	Air Bag System Failure?		·	

### HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage open Document at this Position26. Seat Type 0527. Seat Performance 1

# CHILD SAFETY SEAT

28.	Child/Safety Seat Make/Model	000
29.	Type of Child Safety Seat	0
30.	Orientation	00
31.	Harness	00
32.	Shield	00
33.	Tether	00

# INJURY CONSEQUENCES

34.	Severity (Police Rating)	Q
35.	Treatment - Mortality	O
36.	Type of Med. Facility (Initial)	0
37.	Hospital Stay	00
38.	Working Davs Lost	97

# CAUSE OF DEATH (Completed by Zone Center)

- 39. Time to Death
- 40. Cause #1
- 41. Cause #2
- 42. Cause #3
- 43. Number of Recorded Injuries

### AUTOMATIC BELT SYSTEM

44.	Automatic (Passive) Belt System Availability/F	unction 0
45.	Automatic (Passive) Belt System Use	0
	Automatic (Passive) Belt System Type	0
47.	Proper Use of Automatic (Passive) Belt System	0
48.	Automatic (Passive) Belt System Failure Mode	0
49.	Seat Orientation (this Occupant Position)	1

# TRAUMA DATA (Completed by Zone Center)

- 50. Glasgow Coma Scale (GCS) Score
- 51. Was the Occupant Given Blood?
- 52. Arterial Blood Gases (ABG) HCO3

011

### INTRA ERRORS

01\*\*\*\*\*\*\* NO ERRORS \*\*\*\*\*\*\*

# OCCUPANT'S CHARACTERISTICS

5.	Age	12	6.	Sex	1	•	7.	Height	170
8.	Weight	043	9.	Role	2				

# OCCUPANT'S SEATING

10. Seat Position 97 11. Posture 0

# EJECTION/ENTRAPMENT

12.	Ejection	0	13. E.	jection Area	0	14. Ejection Medium O
15.	Medium Status	O	16. Er	ntrapment	0	

# RESTRAINT SYSTEM EVALUATION

17. Belt System Availability	Q	18. Belt System Use	00
19. Proper Use of Belt '	O	20. Belt Failure Modes During Impact	0
21. Air Bag Availability	0	22. Air Bag Deployment	0
23. Are There Indications of	0	24. Police Reported Restraint Use	4
Air Bag System Failure?			

### HEAD RESTRAINT AND SEAT EVALUATION

25.	Head Restraint Type/Damage	O
	by Occupant at this Position	
26.	Seat Type	09
27.	Seat Performance	1

# CHILD SAFETY SEAT

28.	Child/Safety Seat Make/Model	000
29.	Type of Child Safety Seat	O
30.	Orientation	00
31.	Harness	00
32.	Shield	00
33.	Tether	00

#### INJURY CONSEQUENCES

34.	Severity (Police Rating)	0
35.	Treatment - Mortality	O
36.	Type of Med. Facility (Initial)	Q
37.	Hospital Stay	00
38.	Working Days Lost	97

# CAUSE OF DEATH (Completed by Zone Center)

- 39. Time to Death
- 40. Cause #1
- 41. Cause #2
- 42. Cause #3
- 43. Number of Recorded Injuries

#### AUTOMATIC BELT SYSTEM

44.	Automatic (Passive)	Belt	System	Availability/Function	0
45.	Automatic (Passive)	Belt	System	Use	Q
46.	Automatic (Passive)	Belt	System	Type	0
47.	Proper Use of Automa	itic (	Passive	e) Belt System	0
48.	Automatic (Passive)	Belt	System	Failure Mode	. 0
49.	Seat Orientation (th	is Oc	cupant	Position)	3

### TRAUMA DATA (Completed by Zone Center)

- 50. Glasgow Coma Scale (GCS) Score
- 51. Was the Occupant Given Blood?
- 52. Arterial Blood Gases (ABG) HCO3

OHH0071

011

INTRA ERRORS

UPANT

Ven OCCUPANT HEIGHT OA07 and OCCUPANT SEX OA06, OCCUPANT OA08 is questionable. See Table A2.

01

INTER ERRORS

DING IV94 qual to 0GC001 GC0012 GC0013 MODEL YEAR GV04 does not equal 99, and ODOMETER REA does not equal 999, then IV94 should be less than or e 65\*(CURRENT YEAR - GV04 + 2). GV=01

# ERROR SUMMARY SCREEN

/93

CURRENT VERSION: 6.01

FORM NAME	NUMBER OF DOLLAR SIGNS	NUMBER OF LEVEL 1 ERRORS	NUMBER OF LEVEL 2 ERRORS	VERSION NUMBER CONSISTENT
Accident	O	0	0	Υ
General Vehicle	Ö	Ö	Ŏ	Ý
Vehicle Exterior	Ō	Ō	Ö	Ÿ
Vehicle Interior	0	O	O	Υ
Occupant Assesment	0	0	3	Υ
Occupant Interior	0	0	0	Y
Total Inter Errors		0	1	
Total Case Errors	0	0	4	

```
935.010000000000021<u>915</u>0000001
81038K000000011/
002000000016400
81038K00010012 336.011000000000000000103L0215F
                   6.01 0000000000D112017041FACF50U9MG
                                                        19990960640182102021
81038K01000021
38600000000002700001029-014+0250654111
                   1 ₫₫₫₫₫₫₫0101500
81038K01000022
                   6.01 000000000b10210LYAW03
                                                        275000007039034017000+
81038K01000031
                           012690001
009
                   6.01 0000000000063131066660250600809000066601202000012020666
81038K01000041
                   6.01 00000000d110743211033111033111323
81038K01000042
                         0000319000
                   6.01 000000000084118311511100000000404111414306600000000000000011
81038K01010051
0062990712131566660102196
                   6.01 000000000179040212202103
81038K01010161
                   6.01 0000000000129060217912300
81038K01010261
                   6.01 000000000119060212911300
81038K01010361
                   6.01 0000000000185180832211103
81038K01010461
                   6.01 0000000000149020211412100·
81038K01010561
                   6.01 0000000000144140632201103
81038K01010661
                   6.01 000000000145024253201103
81038K01010761
                   6.01 0000000000154182221202103
81038K01010861
                   6.01 000000000154422222202103
81038K01010961
                   6.01 0000000000179040211063100
81038K01011061
                   6.01 0000000000165041627202203
81038K01011161
                   6.01 000000000185300035211103
81038K01011261
                   6.01 000000000185260025211103
81038K01011361
                        000000000144101034201103
                   6.01
81038K01011461
                        000000000129060012922300
81038K01011561
                   6.01
                   6.01 000000000075217009121366666640411000430616666666666666141
81038K01020051
00970666666660566666115101
                   6.01 000000000B29020212462100
81038K01020161
                   6.01~000000000329020218462100
81038K01020261
                   6.01 0000000000779040211302100
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81038K01020461
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81038K01020561
                   6.01 00000000008312481311FTHF25L3DRA
81038K02000021
80018000000000002701021-018-0110370110
                                                        100000000017221
                   6.01 000000000ppooddddddddddddddddddddd
81038K02000022
                                                        190004004004004003012+
                   6.01 00000000000010101FDEW01
81038K02000031
                           013380001
024
                   6.01 0000000000001166000000666880800006666000000<del>0000000</del>
81038K02000041
                   6.01 000000000
81038K02000042
                         0000180080
                   6.01 0000000000441173075111666660040411000400510006666666666666
81038K02010051
ႣႣႣႣႣႣႣႣჅႣႣႣႣႣႣჅႣႣႣႣႣ100100
                   6.01 000000000009113703521366600040411060400516666666666666666
81038K02020051
81038K02030051
QQ9700000000000000000003QQ1QQ
00000000000002
```

OCCUPANT ASSESSMENT Vehicle: 1 Occupant: 1

#### INTRA ERRORS

HH1281 2 \*\*\*\*\*\* THIS VEHICLE IS INICATED AS HAVING AN AIRBAG. \*\*\*\*\*

HH1282 \*\*\*\*\* CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE \*\*\*\*\*\*\*
HH1283 AIR BAG AVAILABILITY/FUNCTION 0A21 equals 1-3.

HH1991 2 \*\*\*\*\*\* THIS CASE SHOWS AN AIR BAG DIDN'T DEPLOY. \*\*\*\*\*\*
HH1992 \*\*\*\*\* CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE \*\*\*\*\*\*
HH1993 \*\*\*\*\*\* AND NHTSA HEADQUARTERS AT \*\*\*\*\*\*
HH1994 AIR BAG DEPLOYMENT DA22 equals 4.

OCCUPANT ASSESSMENT Vehicle: 2 Occupant: 3

#### INTRA ERRORS

HH0071 2 Given OCCUPANT HEIGHT DA07 and OCCUPANT SEX DA06, OCCUPANT HH0072 WEIGHT DA08 is questionable. See Table A2.

# INTER ERRORS

GCO011 2 If MODEL YEAR GV04 does not equal 99, and ODOMETER READING IV94 GCO012 does not equal 999, then IV94 should be less than or equal to GCO013 65\*(CURRENT YEAR - GV04 + 2). GV=01

EH0011 2 If TREATMENT 0A35 equals 1, then 1st DEFORMATION EXTENT EV11 EH0012 should be greater than 03. GV=01 0A=01

# ERROR SUMMARY SCREEN

93

PSU81 CASE 038K CURRENT VERSION: 6.01

FORM NAME	NUMBER OF DOLLAR SIGNS	NUMBER OF LEVEL 1 ERRORS	NUMBER OF LEVEL 2 ERRORS	VERSION NUMBER CONSISTENT
4			·	
Accident	0	0	0	Y
General Vehicle	<b>O</b>	• 0	0	Υ
Vehicle Exterior	0	0	- <b>O</b>	Υ
Vehicle Interior	<b>O</b>	0	0	Y
Occupant Assesment	0	0	3	. <b>Y</b>
Occupant Interior	<b>O</b>	0	0	Y
Total Inter Errors		0	2	
Total Case Errors	<b>O</b> -	<b>o</b> .	5	

U.S. Department of Transportation

National Highway Traffic Safety Administration

# **SLIDE INDEX**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

Primary S	ampling Ur	nit Number <u>8</u>	Case Number-Stratum
Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
			(SCENE)
1-2		W	Approver
1-2	2	N	DPPNONCH
5	2	5	Approach Locking BACK
			(VEH#1)
6-23	/		1
6-23 24-39	"		EXTERIOR CAMERA NOT WORKED  FORESTLY ONLY 50%  OF FILM USABLE,
			of Film USABLE,
			(VEH#Z)
40-53	2		(VEH#Z) EXTERIAR
40-53 54-58	1,		Futain
			,

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
<u>-</u>			
-AII			







101/ (1892) 4





















PSU 81-038K (1993) #13





PSU 81-038K (1993) #1











8K (1993) #2I





PSU 81-038K (1993) #22







PSU 81-038K (1993) #25





PSU 81-038K (1993) #27











PSU 81-038K (1993) #32



K (1993)#3







ar (1000) au









PSU 81-038K (1993) #40 Best Available



J 81-038K (1993) #41 Best Available



Best Available



Aveileble







PSU 81-038K (1993) #46 Best Available





PSU 81-038K (1993) #48



vailable





t Available



PSU 81-038K (1993) #52 Best Available



PSU 81-038K (1993) #53 Best Available









PSU 81-038K (1993) #57 Best Available



Best Available